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THE

# NATURAL HISTORY

OF

# PLINY.

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BY THE LATE

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# NATURAL HISTORY OF PLINY.

## BOOK XXIV.

### THE REMEDIES DERIVED FROM THE FOREST TREES.

#### CHAP. 1.(1.)—THE ANTIPATHIES AND SYMPATHIES WHICH EXIST AMONG TREES AND PLANTS.

Not even are the forests and the spots in which the aspect of Nature is most rugged, destitute of their peculiar remedies; for so universally has that divine parent of all things distributed her succours for the benefit of man, as to implant for him medicinal virtues in the trees of the desert even, while at every step she presents us with most wonderful illustrations of those antipathies and sympathies which exist in the vegetable world.

Between the quercus[1] and the olive[2] there exists a hatred so inveterate, that transplanted, either of them, to a site previously occupied by the other, they will die.[3] The quercus too, if planted near the walnut, will perish. There is a mortal feud[4] existing also between the cabbage and the vine; and the cabbage itself, so shunned as it is by the vine, will wither immediately if planted in the vicinity of cyclamen[5] or of origanum. We find it asserted even, that aged trees fit to be felled, are cut with all the greater difficulty, and dry all the more rapidly,

[1] See B. xvi. cc. 6, 8, 33, 50.

[2] See B. xvii. c. 3.

[3] As Fée justly remarks, the greater part of these so-called sympathies and antipathies must be looked upon as so many fables. In the majority of instances, it is the habitual requirements of the tree or plant that constitute the difference; thus, for instance, the oak or quercus requires a different site and temperature from that needed by the olive, and the stony soil adopted by the vine is but ill-suited for the cultivation of the cabbage.

[4] See B. xx. c. 36.

[5] See B. xxi. cc. 27, 38, and B. xxv. c. 67.

if touched by the hand of man before the axe is applied: it is a common belief, too, that when their load consists of fruit, beasts of burden are immediately sensible[6] of it, and will instantly begin to sweat, however trifling it may be, unless the fruit is duly shown to them before starting. Fennel-giant, as a fodder, is extremely grateful to the ass, and yet to other beasts of burden it is a deadly poison: hence it is that the ass is consecrated to Father Liber,[7] to which deity the fennel is also sacred.

Inanimate objects again, even of the most insignificant character, have their own peculiar antipathies. Cooks disengage meat of the brine, when it has been too highly salted, by the agency of fine meal and the inner bark[8] of the linden-tree. Salt again, tends to neutralize the sickly flavour of food when over-sweet. The taste of water, when nitrous or bitter, is modified by the addition of polenta,[9] so much so indeed, as to be rendered potable[10] in a couple of hours: it is for a similar reason, too, that a layer of polenta is put[11] in our linen wine-strainers. A similar property is possessed also by the chalk[12] of Rhodes, and the argilla of our own country.

Equal affinities exist as well; pitch, for instance, is extracted by the agency of oil, both of them being of an unctuous nature: oil again, will incorporate only with lime, both of them having a natural antipathy[13] to water. Gum is most[14] easily removed with vinegar, and ink[15] with water; in addition to which, there

[6] See the same statement made in B. xxiii. c. 62.

[7] Or Bacchus.

[8] "Philyra." Fée does not think that it can be of any use for such a purpose. Hardouin says, however, that in his time meat when too highly salted was wrapped in leaves of the lime or linden, for the purpose of extracting the salt.

[9] See B. xviii. c. 14.

[10] Instead of having this effect, Fée says, it would render it much worse.

[11] The intention being to clear the wine, though in reality, as Fée observes, it would have a tendency to turn the wine into vinegar.

[12] Chalk, or in other words, sub-carbonate of lime, and argilla, or aluminous earth combining several earthy salts, would probably neutralize the acetic acid in the wine, but would greatly deteriorate its flavour.

[13] On the contrary, lime would appear to have a great affinity for water, absorbing it with avidity, if we may use the term.

[14] More easily with water; though vinegar will do for the purpose.

[15] "Atramentum." By this passage, Fée says, it is clearly proved that the ink of the ancients was soluble in water, and that it contained neither galls nor salts of iron. What it really was made of is still a matter of

are numberless other instances of sympathy and antipathy which we shall be careful to mention in their appropriate places.

It is in tendencies of this description that the medical art first took its rise; though it was originally intended, no doubt, by Nature, that our only medicaments should be those which universally exist, are everywhere to be found, and are to be procured at no great outlay, the various substances, in fact, from which we derive our sustenance. But at a later period the fraudulent disposition of mankind, combined with an ingenuity prompted by lucre, invented those various laboratories,[16] in which each one of us is promised an extension of his life—that is, if he will pay for it. Compositions and mixtures of an inexplicable nature forthwith have their praises sung, and the productions of Arabia and India are held in unbounded admiration in the very midst[17] of us. For some trifling sore or other, a medicament is prescribed from the shores of the Red Sea; while not a day passes but what the real remedies are to be found upon the tables of the very poorest man among us.[18] But if the remedies for diseases were derived from our own gardens, if the plants or shrubs were employed which grow there, there would be no art, forsooth, that would rank lower than that of medicine.

Yes, avow it we must—the Roman people, in extending its empire, has lost sight of its ancient manners, and in that we have conquered we are the conquered:[19] for now we obey the natives of foreign[20] lands, who by the agency of a single art have even out-generalled our generals.[21] More, however, on this topic hereafter.

### CHAP. 2. (2.)—THE LOTUS OF ITALY: SIX REMEDIES.

We have already[22] spoken in their appropriate places of the

doubt; but it is not improbable that the basis of it was spodium, or ashes of ivory.

[16] "Officinas."

[17] "In medio." The reading is very doubtful here.

[18] This, of course, is mere exaggeration.

[19] He would seem to imply that the medical men of his age had conspired to gain an adventitious importance by imposing upon the credulity of the public, on the principle "Omne ignotum pro magnifico;" much as the "medicine-men" of the North American Indians do at the present day.

[20] He alludes to the physicians of Greece more particularly.

[21] "Imperatoribus quoque imperaverunt."

[22] In B. xiii. c. 32, and B. xvi. c. 53. Pliny ascribes here to the Lotus of Italy, the Celtis Australis of Linnæus, the same medicinal properties that

herb called lotus, and of the plant of Egypt known by the same name and as the "tree of the Syrtes." The berries of the lotus, which is known among us as the "Grecian bean,"[23] act astringently upon the bowels; and the shavings of the wood, boiled in wine, are useful in cases of dysentery, excessive menstruation, vertigo, and epilepsy: they also prevent the hair from falling off. It is a marvellous thing—but there is no substance known that is more bitter than the shavings of this wood, or sweeter than the fruit. The sawdust also of the wood is boiled in myrtle-water, and then kneaded and divided into lozenges, which form a medicament for dysentery of remarkable utility, being taken in doses of one victoriatus,[24] in three cyathi of water.

### CHAP. 3. (3.)—ACORNS: THIRTEEN REMEDIES.

Acorns,[25] pounded with salted axle-grease,[25*] are curative of those indurations known as "cacoethe."[26] The acorn of the holm-oak, however, is the most powerful in its effects; and in all these trees the bark is still more efficacious, as well as the inner membrane which lies beneath it. A decoction of this last is good for cœliac affections; and it is applied topically in cases of dysentery, as well as the acorns, which are employed also for the treatment of stings inflicted by serpents, fluxes, and suppurations. The leaves, acorns, and bark, as well as a decoction prepared from them, are good as counterpoisons. A decoction of the bark, boiled in cows' milk, is used topically for stings inflicted by serpents, and is administered in wine for dysentery. The holm-oak is possessed of similar properties.

### CHAP. 4. (4.)—THE KERMES-BERRY OF THE HOLM-OAK: THREE REMEDIES.

The scarlet berry[27] of the holm-oak is applied to fresh

are given by Dioscorides, B. i. c. 171, to the Egyptian bean or Nymphæa Nelumbo of Linnæus. Galen gives the same account as Dioscorides; it is not improbable, therefore, that Pliny is in error.

[23] See B. xvi. c. 53, Note 55.

[24] Half a denarius. See Introduction to Vol. III.

[25] Acorns, as well as the bark of the various kinds of oak, are of an astringent nature.

[25*] Or, hogs' lard.

[26] In the singular number, "cacoethes," "a bad habit;" signifying a malignant or cancerous tumour.

[27] See B. xvi. c. 12. All the properties here ascribed to it, Fée says,

wounds with vinegar; and in combination with water it is dropt into the eyes in cases of defluxion of those organs or of ecchymosis. There grows also in most parts of Attica, and in Asia, a berry of this description, which becomes transformed with great rapidity into a diminutive worm, owing to which circumstance the Greeks have given it the name of "scolecion:"[28] it is held, however, in disesteem. The principal varieties of this berry have been previously[29] described.

### CHAP. 5.—GALL-NUTS: TWENTY-THREE REMEDIES.

And no fewer are the varieties of the gall-nut which we have described:[30] we have, for instance, the full-bodied gall-nut, the perforated one, the white, the black, the large, the small, all of them possessed of similar properties; that, however, of Commagene is generally preferred. These substances remove fleshy excrescences on the body, and are serviceable for affections of the gums and uvula,[31] and for ulcerations of the mouth. Burnt, and then quenched in wine, they are applied topically in cases of cœliac affections and dysentery, and with honey, to whitlows, hang-nails, malformed nails, running ulcers, condylomatous swellings, and ulcerations of the nature known as phagedænic.[32] A decoction of them in wine is used as an injection for the ears, and as a liniment for the eyes, and in combination with vinegar they are employed for eruptions and tumours.

The inner part of the gall, chewed, allays tooth-ache, and is good for excoriations between the thighs, and for burns. Taken unripe in vinegar, they reduce the volume of the spleen; and, burnt and then quenched in salt and vinegar, they are used as a fomentation for excessive menstruation and procidence of the uterus. All varieties of the gall-nut stain the hair black.

### CHAP. 6.—MISTLETOE: ELEVEN REMEDIES.

We have already[33] stated that the best mistletoe is that which grows on the robur,[34] and have described the manner in

are hypothetical. It is no longer used in medicine, at least to any recognized extent.

[28] Hence the Latin word "vermiculum," from which our word "vermilion" is derived.

[29] In B. xvi. c. 12.

[30] In B. xvi. c. 9.

[31] They might be used advantageously, Fée thinks, in the shape of a decoction, for procidence of the uvula and uterus.

[32] "Eating," or "corrosive."

[33] See B. xvi. cc. 11, 93, 94.

[34] See B. xvi. cc. 10, 11.

which it is prepared. Some persons, after bruising the berries, boil them in water, till nothing appears on the surface, while others, again, bite the berries with the teeth, and reject the skins.[35] The best kind of viscus is that which has none of the outer skin in it, is extremely light, yellow without, and of a leek-green colour within. There is no substance more glutinous than this: it is of an emollient nature, disperses tumours, and acts as a desiccative upon scrofulous sores; combined with resin and wax, it heals inflamed swellings of every description. Some persons add galbanum as well, using equal proportions of each ingredient, and this preparation they employ also for the treatment of wounds.

The viscus of the mistletoe has the additional property also of rectifying malformed nails; but to effect this it must be taken off at the end of seven days, and the nails must be washed with a solution of nitre.[35*] Some persons have a sort of superstitious notion that the viscus will be all the more efficacious if the berries are gathered from the robur at new moon, and without the aid of iron. They have an impression too, that if it has not touched the ground, it will cure epilepsy,[36] that it will promote conception in females if they make a practice of carrying it about them: the berries, chewed and applied to ulcers, are remarkably efficacious for their cure, it is said.

### CHAP. 7.—THE EXCRESCENCES WHICH GROW ON THE ROBUR: ONE REMEDY. THE CERRUS: EIGHT REMEDIES.

The round excrescences[37] which grow on the robur * * * and mixed with bear's grease, are remedial in cases of loss of the hair by alopecy.

The leaves, bark, and acorns of the cerrus[38] act as a desiccative upon gatherings and suppurations, and arrest fluxes. A decoction[39] of them, used as a fomentation, strengthens such parts of the body as are paralyzed; and it is a very good plan

[35] This passage, as Fée remarks, is somewhat obscure.

[35*] As to the identity of the "nitrum" of Pliny, see B. xxxi. cc. 22, 46.

[36] Fée says, that till very recently it was a common belief that the oak mistletoe is curative of epilepsy. It was also employed as an ingredient in certain antispasmodic powders.

[37] See B. xvi. c. 10. [38] See B. xvi. c. 8.

[39] This decoction would be of a tonic and astringent nature, owing to the tannin and gallic acid which the leaves and bark contain.

to employ it as a sitting-bath, for its desiccative or astringent effects upon the lower extremities. The root of this tree neutralizes the venom of the scorpion.

### CHAP. 8.—THE CORK TREE: TWO REMEDIES.

The bark of the cork-tree,[40] pulverized and taken in warm water, arrests hæmorrhage at the mouth and nostrils;[41] and the ashes of it, taken in warm wine, are highly extolled as a cure for spitting of blood.

### CHAP. 9. (5.)—THE BEECH: FOUR REMEDIES.

The leaves[42] of the beech are chewed for affections of the lips and gums. A liniment is made of the ashes of beech-mast for urinary calculus, and, in combination with honey, for alopecy.

### CHAP. 10.—THE CYPRESS: TWENTY-THREE REMEDIES.

The leaves of the cypress[43] are pounded and applied to wounds inflicted by serpents, and with polenta, to the head, in cases of sunstroke. They are used also for hernia, and an infusion of them is taken in drink.[44] They are applied with wax to swellings of the testes, and mixed with vinegar they stain the hair black.[45] Beaten up with twice the quantity of light bread, and then kneaded with Aminean[46] wine, they are found very soothing for pains in the feet and sinews.

The excrescences of this tree are taken in drink for the stings of serpents and for discharges of blood from the mouth; they are used also as a topical application for gatherings. Fresh-gathered and beaten up with axle-grease and bean-meal, they are good for hernia; and an infusion of them is

[40] See B. xvi. c. 13.

[41] "Ex utrâlibet parte."

[42] There is no foundation, Fée says, for any of these statements.

[43] See B. xvi. c. 60. The leaves of the cypress, Fée says, contain tannin and an essential oil; all the medicinal properties therefore, here attributed to them, which are not based upon these principles, must be looked upon as hypothetical.

[44] Down to the present century the leaves and fruit of the cypress were recommended in some medical works for the cure of hernia. The juice, however, of the leaves, taken internally, would be, as Fée says, highly dangerous.

[45] Owing probably to the gallic acid they contain.

[46] See B. xiv. c. 4.

taken in drink for the same complaint. In combination with meal, they are applied topically to imposthumes of the parotid glands, and to scrofulous sores. From these excrescences, pounded along with the seed, a juice is extracted, which, mixed with oil, disperses films of the eyes. Taken in doses of one victoriatus,[47] in wine, and applied at the same time in a pulpy, dried fig, the seeds of which have been removed, this juice cures maladies of the testes and disperses tumours: mixed with leaven, it heals scrofulous sores.

The root of the cypress, bruised with the leaves and taken in drink, is curative of diseases of the bladder, strangury, and the sting of the phalangium.[48] The shavings of the wood, taken in drink, act as an emmenagogue, and neutralize the venom of the scorpion.

### CHAP. 11.—THE CEDAR: THIRTEEN REMEDIES.

The larger cedar, known as the "cedrelates,"[49] produces a pitch called "cedria," which is very useful for tooth-ache, it having the effect of breaking[50] the teeth and extracting them, and so allaying the pain. We have already[51] stated how the juices of cedar are extracted, so remarkably useful for seasoning books,[52] were it not for the head-ache they produce. This extract from the cedar preserves[53] the bodies of the dead uncorrupted for ages, but exercises a noxious effect upon the bodies of the living—singular that there should be such a diversity in its properties, taking away life from animated

[47] See Introduction to Vol. III.

[48] See B. x. c. 28, and B. xi. cc. 24, 28.

[49] See B. xiii. c. 11.

[50] Fée remarks, that many of the moderns attribute to frankincense the properties here ascribed to cedria; a most unfounded notion, he thinks.

[51] In B. xiv. c. 25, and B. xvi. cc. 21, 22.

[52] Sillig reads "volumina;" in which case it is not improbable that the allusion is to the practice of seasoning the paper of manuscripts with a preparation of cedar, as a preservative against mildew and worms. Another reading is "lumina," and it is not impossible that it is the right one, meaning that pitch of cedar is useful for making lamps or candles. Fée reminds us that we are not to confound the "cedria" with the "cedrium" of B. xvi. c. 21, though Pliny seems here to confound the two. See Note 38 to that Chapter.

[53] As in B. xvi. c. 21, he has said the same of "cedrium," a red tar charged with empyreumatic oil, it is clear that he erroneously identifies it with "cedria," or pitch of cedar. It is with this last, in reality, that the Egyptians embalmed the dead, or rather preserved them, by dipping them in the boiling liquid.

beings, and imparting a sort of life, as it were, to the dead! It injures clothing also and destroys[54] animal life. It is for this reason that I cannot recommend it to be taken internally for the cure of quinzy and indigestion, though there are some who advise it: I should be greatly in dread too, to rinse the teeth with it, in combination with vinegar, for tooth-ache, or to use it as an injection for the ears in cases of hardness of hearing, or for worms in those organs. There is one very marvellous story told about it—if the male organs, they say, are rubbed with it just before the sexual congress, it will effectually prevent impregnation.[55]

Still, however, I should not hesitate to employ it as a friction for phthiriasis or porrigo. It is strongly recommended also, in raisin wine, as an antidote to the poison of the sea-hare,[56] but I should be more ready to use it as a liniment for elephantiasis. Some authors have prescribed it as an ointment for foul ulcers and the fleshy excrescences which grow in them, as also for spots and films on the eyes; and have recommended it to be taken, in doses of one cyathus, for ulcerations of the lungs, and for tapeworm.

There is an oil extracted from this pitch, known as "pisselæon,"[57] the properties of which are of increased activity for all the purposes before-mentioned. It is a well-known fact that the saw-dust of cedar will put serpents to flight, and that a similar effect is produced by anointing the body with the berries[58] bruised in oil.

### CHAP. 12.—CEDRIDES: TEN REMEDIES.

Cedrides, or in other words, the fruit of the cedar,[59] is curative of coughs, acts as a diuretic, and arrests looseness of the bowels. It is good also for ruptures, convulsions, spasms, and strangury, and is employed, as a pessary, for affections of the uterus. It is used also to neutralize the

[54] If he implies that it is poisonous, such in reality is not the case.

[55] A mere absurdity, of course.

[56] It would be of no use whatever for the cure of injuries inflicted by the Aplysia vulgaris or Aplysia depilans of Linnæus. See B. ix. c. 72, and B. xxxii. c. 3.

[57] See B. xv. c. 7, and B. xxv. c. 22. "Pitch oil," a volatile oil.

[58] This mention of the berries clearly proves, Fée thinks, that the Cedrelates of Pliny belongs in reality to the genus Juniperus.

[59] Or of the juniper, Fée thinks.

venom of the sea-hare,[60] and for the cure of the various affections above-mentioned, as also of gatherings and inflammations.

### CHAP. 13.—GALBANUM: TWENTY-THREE REMEDIES.

We have already[61] given some description of galbanum: to be good, it should be neither too moist nor too dry, but just in the state which we have mentioned.[62] It is taken by itself for inveterate coughs, asthma, ruptures, and convulsions; and it is employed externally for sciatica, pains in the sides, inflamed tumours,[63] boils, denudations of the bones, scrofulous sores, nodes upon the joints, and tooth-ache. It is applied with honey also, to ulcerations of the head. In combination with oil of roses or with nard, it is used as an injection for suppurations of the ears; and the odour of it is useful for epilepsy, hysterical suffocations, and faintness at the stomach. Employed as a pessary or as a fumigation, it brings away the fœtus in cases of miscarriage; branches too of hellebore covered with it and laid beneath the patient, have a similar effect.

We have already[64] stated that serpents are driven away by the fumes of burnt galbanum, and they will equally avoid persons whose body has been rubbed with it. It is curative also of the sting of the scorpion. In protracted deliveries, a piece of galbanum the size of a bean is given in one cyathus of wine: it has the effect also of reducing the uterus when displaced, and, taken with myrrh and wine, it brings away the dead fœtus. In combination with myrrh and wine too, it neutralizes poisons — those which come under the denomination of "toxica"[65] in particular. The very touch of it, mixed with oil and spondylium,[66] is sufficient to kill a serpent.[67] It is generally thought to be productive of strangury.

[60] See Note 56 above.
[61] In B. xii. c. 56.
[62] Cartilaginous, clear, and free from ligneous substances.
[63] It is still employed, Fée says, to a small extent, as a topical application for ulcerated sores. Its properties are energetic, but nearly all the uses to which Pliny speaks of it as being applied are hypothetical.
[64] In B. xii. c. 56.
[65] Narcotic poisons.
[66] See B. xii. c. 58. See also c. 16 of this Book.
[67] This statement is entirely fabulous.

CHAP. 14. (6.)—HAMMONIACUM: TWENTY-FOUR REMEDIES.

Of a similar nature to galbanum is hammoniacum, a tear-like gum, the qualities of which are tested in manner already[68] stated. It is of an emollient, warming, resolvent, and dispellent nature. Employed as an ingredient in eye-salves, it improves the sight. It disperses prurigo, effaces the marks of sores, removes spots in the eyes, and allays tooth-ache, more particularly when burnt. It is very useful too, taken in drink, for hardness of breathing, pleurisy, affections of the lungs, diseases of the bladder, bloody urine, maladies of the spleen, and sciatica: employed in a similar manner, it acts as a purgative upon the bowels. Boiled with an equal proportion of pitch or wax, and with oil of roses, it is good for diseases of the joints, and for gout. Employed with honey it ripens hard tumours, extracts corns, and has an emollient effect upon indurations. In combination with vinegar and Cyprian wax, or oil of roses, it is extremely efficacious as a liniment for affections of the spleen. In cases of extreme lassitude, it is an excellent plan to use it as a friction, with vinegar and oil, and a little nitre.

CHAP. 15.—STORAX: TEN REMEDIES.

In speaking too of the exotic trees, we have made mention[69] of the properties of storax. In addition to those which we have already mentioned, it ought to be very unctuous, without alloy, and to break to pieces in whitish fragments. This substance is curative of cough, affections of the fauces, diseases of the chest, and obstructions or indurations of the uterus. Taken in drink, or employed as a pessary, it acts as an emmenagogue; it has a laxative effect also upon the bowels. I find it stated that, taken in moderate doses, storax dispels melancholy; but that when employed in large quantities, it promotes it. Used as an injection it is good for singings in the ears, and employed as a friction, for scrofulous swellings and nodes of the sinews. It neutralizes poisons of a cold nature, and consequently, hemlock.[70]

[68] In B. xii. c. 49. Gum ammoniac is still used to some small extent in modern medicine, for asthma, boils, tumours, and diseases of the bladder.

[69] In B. xii. c. 55. Fée says that it is of the Amygdalite storax that Pliny is here speaking. It is little employed at the present day for internal maladies.

[70] This is not the fact.

CHAP. 16.—SPONDYLIUM: SEVENTEEN REMEDIES.

At the same time we have also spoken[71] of spondylium; an infusion of which is poured upon the head in cases of phrenitis and lethargy, and of head-ache of long standing. Combined with old oil, it is taken in drink for affections of the liver, jaundice, epilepsy, hardness of breathing, and hysterical suffocations, maladies for which it is equally serviceable in the shape of a fumigation. It relaxes the bowels, and with rue it is applied to ulcers of a serpiginous nature. The juice which is extracted from the blossom is a most useful injection for suppurations of the ears; but the moment it is extracted it should be covered up, as flies and other insects of a similar nature are remarkably fond of it.

Scrapings of the root, introduced into the interior of fistulas, have a caustic effect upon their callosities; and they are sometimes used, in combination with the juice, as an injection for the ears. The root itself also is prescribed for jaundice, and for diseases of the liver and uterus. If the head is rubbed with the juice, it will make the hair curl.[72]

CHAP. 17.—SPHAGNOS, SPHACOS, OR BRYON: FIVE REMEDIES.

Sphagnos, sphacos, or bryon, grows, as we have already[73] stated, in Gaul. A decoction of it, employed as a sitting-bath, is useful for affections of the uterus: mixed with nasturtium, and beaten up in salt water, it is good for the knees and for swellings in the thighs. Taken in drink with wine and dried resin, it acts very powerfully as a diuretic. Pounded in wine with juniper berries, and taken in drink, it draws off the water in dropsy.

CHAP. 18.—THE TEREBINTH: SIX REMEDIES.

The leaves and root of the terebinth[74] are used as applica-

[71] In B. xii. c. 58. It is no longer used in medicine, though possessed of properties of considerable energy. Fée says that most of the assertions here made respecting it are unfounded.

[72] An absurdity, Fée remarks.

[73] In B. xii. c. 50. Various lichens probably were called by this name. No use is made of them in modern medicine.

[74] See B. xiii. c. 12. The leaves and root of the terebinth or turpentine-tree have some medicinal properties, owing to their resin or essential oil; but no use is made of them in modern medicine.

tions for gatherings; and a decoction of them is strengthening to the stomach. The seed of it is taken in wine for head-ache and strangury: it is slightly laxative to the bowels, and acts as an aphrodisiac.

CHAP. 19.—THE PITCH-TREE AND THE LARCH: EIGHT REMEDIES.

The leaves of the pitch-tree[75] and the larch,[76] beaten up and boiled in vinegar, are good for tooth-ache. The ashes of the bark are used for excoriations and burns. Taken in drink this substance arrests diarrhœa, and acts as a diuretic; and used as a fumigation, it reduces the uterus when displaced. The leaves of the pitch-tree are particularly good for the liver, taken in doses of one drachma in hydromel.

It is a well-known fact that forests planted solely with trees from which pitch and resin are extracted, are remarkably beneficial for patients suffering from phthisis,[77] or who are unable to recover their strength after a long illness: indeed it is said, that in such cases to breathe the air of localities thus planted, is more beneficial even than to take a voyage to Egypt,[78] or to go on a summer's journey to the mountains to drink the milk there, impregnated with the perfumes of plants.

CHAP. 20.—THE CHAMÆPITYS: TEN REMEDIES.

The chamæpitys,[79] called in Latin "abiga,"[80] because it promotes abortion, and known to some as "incense of the earth,"[81] has branches a cubit in length, and the odour and

[75] See B. xvi. c. 18.

[76] See B. xvi. c. 19. The leaves of these trees are of an astringent and acid nature, Fée says, but they are no longer employed in medicine. All that Pliny here states relative to them is very problematical.

[77] Fée says that it is still the practice of the Turkish physicians to recommend to their patients the air of the cypress groves of Candia. He states also, that it is a very general supposition that resins, balms, and balsams are good for pulmonary phthisis, but is of opinion that the notion is founded upon no solid basis.

[78] See B. xxxi. c. 33, also Celsus, B. iii. c. 22. Similar to a voyage to Madeira, recommended to our consumptive patients at the present day.

[79] Or "ground-pine."

[80] From "abigo," to "drive away," it would appear.

[81] "Thus terræ." The Teucrium Iva of Linnæus, Fée says, or Chamæpitys moschata. Fée remarks that Pliny commits a great error in giving to it the blossoms of the pine, and that he assigns larger proportions than really belong to it. The name "incense of the earth," is very inappropriate; for it has none of the odour of incense, but merely a resinous smell.

blossoms of the pine. Another variety[82] of it, which is somewhat shorter, has all the appearance of being bent[83] downwards; and there is a third,[84] which, though it has a similar smell, and consequently the same name, is altogether smaller, with a stem the thickness of one's finger, and a diminutive, rough, pale leaf: it is found growing in rocky localities. All these varieties are in reality herbaceous productions; but in consequence of the resemblance of the name,[85] I have thought it as well not to defer the consideration of them.

These plants are good for stings inflicted by scorpions, and are useful as an application, mixed with dates or quinces, for maladies of the liver: a decoction of them with barley-meal is used for the kidneys and the bladder. A decoction of them in water is used also for jaundice and for strangury. The kind last mentioned, in combination with honey, is good for wounds inflicted by serpents, and a pessary is made of it, with honey, as a detergent for the uterus. Taken in drink it brings away coagulated blood, and rubbed upon the body it acts as a sudorific: it is particularly useful also for the kidneys. Pills of a purgative nature are made of it for dropsy, with figs.[86] Taken in wine, in doses of one victoriatus,[87] it dispels lumbago, and cures coughs that are not of an inveterate description. A decoction of it in vinegar, taken in drink, will instantaneously bring away the dead fœtus, it is said.

### CHAP. 21.—THE PITYUSA: SIX REMEDIES.

For a similar[88] reason, too, we shall accord the same distinction to the pityusa, a plant which some persons reckon among the varieties of the tithymalus.[89] It is a shrub,[90] re-

[82] The Teucrium chamæpitys of Linnæus, the Chamæpitys lutea vulgaris of C. Bauhin, the ground-pine.

[83] The leaves are imbricated, and the branches bend downwards, like those of the pine, whence the name.

[84] The Teucrium pseudo-chamæpitys of Linnæus, the bastard ground-pine.

[85] To the pine or pitch-tree, mentioned in c. 19.

[86] They are rich in essential oil, and are of a tonic nature. All that is here stated as to their medicinal uses, and which cannot be based upon that property, is hypothetical, Fée says, and does not deserve to be refuted.

[87] See Introduction to Vol. III.

[88] The resemblance of its name to the "pitys," or pitch-tree.

[89] See B. xxvi. c. 39.

[90] An Euphorbia with a ligneous stem, the Euphorbia pityusa of Linnæus.

sembling the pitch-tree in appearance, and with a diminutive purple blossom. A decoction of the root, taken in doses of one hemina, carries off the bilious and pituitous secretions by[91] stool, and a spoonful of the seed, used as a suppository, has a similar effect. A decoction of the leaves in vinegar removes scaly eruptions of the skin; and in combination with boiled rue, it effects the cure of diseases of the mamillæ, gripings in the bowels, wounds inflicted by serpents, and incipient gatherings of most kinds.

### CHAP. 22.—RESINS: TWENTY-TWO REMEDIES.

In treating, first of wines,[92] and then of trees,[93] we have stated that resin is the produce of the trees above-mentioned, and have described the several varieties of it, and the countries in which they are respectively produced. There are two principal kinds of resin, the dry and the liquid.[93*] The dry resins are extracted from the pine[94] and the pitch-tree,[95] the liquid from the terebinth,[96] the larch,[97] the lentisk,[98] and the cypress;[99] these last producing it in the province of Asia and in Syria. It is an error[1] to suppose that the resin of the pitch-tree is the same as that of the larch; for the pitch-tree yields an unctuous[2] resin, and of the same consistency as frankincense, while that of the larch is thin, like honey in colour, and of a powerful odour. It is but very rarely that medical men make use of liquid resin, and when they do, it is mostly that produced by the larch, which is administered in an egg for

The characteristics of it differ, however, from the description here given by Pliny. It is no longer used in medicine, though, like the other Euphorbiaceæ, it has very active properties.

[91] This, Fée says, is consistent with truth.

[92] In B. xiv. c. 25.

[93] B. xvi. cc. 16, 21, 22, 23.

[93*] Or, as they are called at the present day, the resins, and the oleo-resins, or terebinthines.

[94] Fée thinks that this name extends to the numerous species of resiniferous trees.

[95] The Abies excelsa of Linnæus.

[96] The Pistacia terebinthus; see B. xiii. c. 12. It yields a valuable turpentine, known in commerce as that of Cyprus or Chios.

[97] The so-called Venice turpentine is extracted from the larch.

[98] It yields mastich solely, a solid resin.

[99] It yields a terebinthine, and a very diminutive amount of solid resin.

[1] Fée says, that if the same methods are employed, the same products may be obtained, though in general the larch yields the better terebinthine.

[2] Fée thinks that he is speaking of a thick resin, or *galipot*, as the French call it, of the consistency of honey.

cough and ulcerations of the viscera. The resin of the pine, too, is far from extensively used, and that of the other kinds is always boiled[3] before use: on the various methods of boiling it, we have enlarged at sufficient length already.[4]

As to the produce of the various trees, the resin of the terebinth is held in high esteem, as being the most odoriferous and the lightest, the kinds[5] which come from Cyprus and Syria being looked upon as the best. Both these kinds are the colour of Attic honey; but that of Cyprus has more body, and dries with greater rapidity. In the dry resins the qualities requisite are whiteness, purity, and transparency: but whatever the kind, the produce of mountainous[6] districts is always preferred to that of champaign countries, and that of a north-eastern aspect to that of any other quarter. Resins[7] are dissolved in oil as a liniment and emollient cataplasm for wounds; but when they are used as a potion, bitter almonds[8] are also employed. The curative properties of resins consist in their tendency to close wounds, to act as a detergent upon gatherings and so disperse them, and to cure affections of the chest.

The resin of the terebinth * * * it is used too, warmed, as a liniment for pains in the limbs, the application being removed after the patient has taken a walk in the sun. Among slave-dealers too, there is a practice of rubbing the bodies of the slaves with it, which is done with the greatest care, as a corrective for an emaciated appearance; the resin having the property of relaxing the skin upon all parts of the body, and rendering it more capable of being plumped out by food.[9]

Next after the resin of the terebinth comes that of the

[3] Boiled terebinthine, or turpentine, is still used, Fée says, in medicine; that process disengaging the essential oil.

[4] In B. xvi. c. 22.

[5] Fée thinks that in reality these are terebinthines, and not resins.

[6] It has been generally remarked that aromatic plants grown on mountains have a stronger perfume than those of the plains; Fée queries whether this extends to the resins.

[7] Though of little importance in modern medicine, resins and terebinthines are still employed as the basis of certain plasters and other preparations.

[8] Such a potion as this, Fée says, would but ill agree with a person in robust health even.

[9] There would be no necessity whatever, Fée says, for such a process, a plentiful supply of food being quite sufficient for the purpose. Galen recommends frictions of terebinthine for the improvement of the health.

lentisk:[10] it possesses astringent properties, and is the most powerful diuretic of them all. The other resins are laxative to the bowels, promote the digestion of crudities, allay the violence of inveterate coughs, and, employed as a fumigation, disengage the uterus of foreign[11] bodies with which it is surcharged: they are particularly useful too as neutralizing the effects of mistletoe; and, mixed with bull suet and honey, they are curative of inflamed tumours and affections of a similar nature. The resin of the lentisk is very convenient as a bandoline for keeping stubborn eyelashes in their place: it is useful also in cases of fractures, suppurations of the ears, and prurigo of the generative organs. The resin of the pine is the best of them all for the cure of wounds in the head.

### CHAP. 23. (7.)—PITCH: TWENTY-THREE REMEDIES.

We have also stated on a previous occasion[12] from what tree pitch is extracted, and the methods employed for that purpose. Of this also there are two kinds; thick pitch and liquid pitch.[13] Of the several varieties of thick pitch the most useful for medicinal purposes is that of Bruttium;[14] for being both extremely unctuous and very resinous, it reunites the properties both of resin and of pitch, that of a yellow reddish colour being the most highly esteemed. As to the statement made in addition to this, that the produce of the male tree is the best, I do not believe that any such distinction is at all possible.

Pitch is of a warming, cicatrizing tendency: mixed with polenta it is particularly useful as a neutralizer of the venom of the cerastes,[15] and in combination with honey it is used for quinzy, catarrhs, and fits of sneezing caused by phlegm. With oil of roses it is used as an injection for the ears, and employed as a liniment with wax it heals lichens. It relaxes[16] the bowels, also, and used as an electuary, or applied with

[10] Mastich. The medicinal properties here attributed to it, Fée says, do not exist.

[11] "Onera." [12] In B. xiv. c. 25, and B. xvi. cc. 21, 22.

[13] Tar. See B. xvi. c. 21.

[14] The pitch of Calabria, Fée says, is known at the present day as pitch resin. All that Pliny states as to the medicinal properties of pitch, is destitute, Fée thinks, of the slightest probability.

[15] Or horned serpent. [16] Taken internally, of course.

honey to the tonsillary glands, it facilitates expectoration. Applied topically, it acts as a detergent upon ulcers, and makes new flesh. Mixed with raisins and axle-grease, it forms a detergent plaster for carbuncles and putrid ulcers, and, with pine-bark or sulphur, for serpiginous sores. Pitch has been administered too by some, in doses of one cyathus, for phthisis and inveterate coughs. It heals chaps of the feet and rectum, inflamed tumours, and malformed nails; and used as a fumigation, it is curative of indurations and derangements of the uterus, and of lethargy. Boiled with barley-meal and the urine of a youth who has not arrived at puberty, it causes scrofulous sores to suppurate. Dry pitch is used also for the cure of alopecy. For affections of the mamillæ, Bruttian pitch is warmed in wine with fine spelt meal, and applied as hot as can be borne.

CHAP. 24.—PISSELÆON AND PALIMPISSA: SIXTEEN REMEDIES.

We have already[17] described the way in which liquid pitch and the oil known as pisselæon are made. Some persons boil the pitch over again, and give it the name of "palimpissa."[18] For quinzy[19] and affections of the uvula, liquid pitch is employed internally. It is used also for the cure of ear-ache, for the improvement of the sight, and as a salve for the lips; and is employed for hysterical suffocations, inveterate coughs, profuse expectorations, spasms, nervousness, opisthotony, paralysis, and pains in the sinews. It is a very excellent remedy too for itch in dogs and beasts of burden.

CHAP. 25.—PISSASPHALTOS: TWO REMEDIES.

There is pissasphaltos too, a natural production of the territory of the Apolloniates,[20] and consisting of pitch mixed

[17] In B. xvi. c. 22, and B. xv. c. 7.

[18] "Pitch boiled over again."

[19] Fée says, that this statement is quite beyond all belief. Indeed there is little doubt that tar taken internally for quinzy, would only tend to aggravate the complaint. He states that a solution of tar in water is sometimes used internally with success for pulmonary phthisis. Bishop Berkeley wrote his Siris, on the virtues of Tar-water as a medicament, having been indebted to it for his recovery from an attack of colic.

[20] See B. xvi. c. 23. His description here is faulty, it being solely a natural pitch or mineral bitumen, without any admixture of vegetable pitch. Vitruvius calls this pissasphalt, pitch; but Ælian, more correctly,

with bitumen. Some persons, however, make this mixture artificially, and employ it for the cure of itch in cattle, and of injuries done by the young sucklings to the mamillæ. The most esteemed portion of it is that which floats on the surface when boiled.

### CHAP. 26.—ZOPISSA: ONE REMEDY.

We have already[21] stated that zopissa is the pitch, macerated with salt-water and wax, that has been scraped from off the bottoms of ships. The best kind is that taken from ships which have been to sea for the first time. It is used as an ingredient in plasters of an emollient nature, employed to disperse gatherings.

### CHAP. 27.—THE TORCH-TREE: ONE REMEDY.

A decoction in vinegar of the wood of the torch-tree[22] makes a most efficacious gargle for tooth-ache.

### CHAP. 28.—THE LENTISK: TWENTY-TWO REMEDIES.

The seed, bark, and tear-like juices of the lentisk are diuretics, and act astringently upon the bowels:[23] a decoction of them, used as a fomentation, is curative of serpiginous sores, and is applied topically for humid ulcerations and erysipelas; it is employed also as a collutory for the gums. The teeth are rubbed with the leaves in cases of tooth-ache, and they are rinsed with a decoction of the leaves when loose:[24] this decoction has the effect also of staining[25] the hair. The gum of this tree is useful for diseases of the rectum, and all cases in which desiccatives and calorifics are needed; a decoction too of the gum is good for the stomach, acting as a carminative

bitumen. The names now given to it are mineral pitch, and malthe or pitch of Malta.

[21] In B. xvi. c. 23. Fée thinks that the use of it is more likely to have been injurious than beneficial.

[22] Or tæda. See B. xvi. c. 19.

[23] Fée says, that within the last century, the wood of the lentisk or mastich, and the oil of its berries, figured in the Pharmacopœias. Their medicinal properties are far from energetic, but the essential oil may probably be of some utility as an excitant.

[24] This property is still attributed in the East to the leaves and resin of the lentisk. We learn from Martial, B. xiv. Epig. 22, that the wood of the lentisk, as well as quills, was used for tooth-picks.

[25] This, Fée says, is not the fact.

and diuretic; it is applied also to the head, in cases of headache, with polenta. The more tender of the leaves are used as an application for inflammations of the eyes.

The mastich[26] produced by the lentisk is used as a bandoline for the hairs of the eye-lids, in compositions for giving a plumpness to the face, and in cosmetics for smoothing[27] the skin. It is employed for spitting of blood and for inveterate coughs, as well as all those purposes for which gum acacia is in request. It is used also for the cure of excoriations; which are fomented either with the oil extracted from the seed, mixed with wax, or else with a decoction of the leaves in oil. Fomentations too are made of a decoction of it in water for diseases of the male organs.[28] I know for a fact, that in the illness of Considia, the daughter of M. Servilius, a personage of consular rank, her malady, which had long resisted all the more severe methods of treatment, was at last successfully treated with the milk of goats that had been fed upon the leaves of the lentisk.

CHAP. 29. (8.)—THE PLANE-TREE: TWENTY-FIVE REMEDIES.

The plane-tree[29] neutralizes the bad effects of bites inflicted by the bat.[30] The excrescences of this tree, taken in doses[31] of four denarii, in wine, act as an antidote to the venom of serpents of all kinds and of scorpions, and are curative of burns. Pounded with strong vinegar, squill vinegar in particular, they arrest hæmorrhage of every kind; and with the addition of honey, they remove freckles, carcinomatous sores, and black spots of long standing on the skin.

The leaves again, and the bark of this tree, are used in the form of liniments for gatherings and suppurations, and a decoction of them is employed for a similar purpose. A decoction of the bark in vinegar is remedial for affections of the teeth, and the more tender of the leaves boiled in white wine are good for the eyes. The down which grows upon the

[26] See B. xii. c. 36, and B. xiv. c. 25.

[27] "Smegmata."

[28] Littré thus reads the whole passage, "Sive cum aquâ, ut ita foveantur," —"A decoction of it is made with water for the purpose of fomentation."

[29] See B. xii. c. 3.

[30] "Adversantur vespertilionibus." Fée sees difficulties in this passage, which really do not seem to exist.

[31] The produce of the plane is no longer employed in medicine.

leaves[32] is injurious to both the ears and eyes. The ashes of the excrescences of this tree heal such parts of the body as have been burnt or frost-bitten. The bark, taken in wine, reduces the inflammation caused by the stings of scorpions.

### CHAP. 30.—THE ASH: FIVE REMEDIES.

We have already[33] made some mention of the virtues possessed by the ash as an antidote to the venom of serpents. The seed of it is enclosed in follicules, which are good for diseases of the liver, and, in combination with wine, for pains in the sides: they are employed also for drawing off the water in dropsy. They have the property, too, of diminishing obesity, and of gradually reducing the body to a state of comparative emaciation,[34] the follicules being pounded in wine and administered in proportion to the bodily strength; thus, for instance, to a child, five of them are given in three cyathi of wine, but for persons in more robust health, seven are prescribed, in five cyathi of wine.

We must not omit to state that the shavings and saw-dust of this wood are of a highly dangerous nature, according to some.

### CHAP. 31.—THE MAPLE: ONE REMEDY.

The root of the maple,[35] beaten up in wine, is extremely efficacious as a topical application for pains in the liver.

### CHAP. 32.—THE POPLAR: EIGHT REMEDIES.

We have already[36] mentioned, when speaking of the unguents, the use that is made of the berries[37] of the white poplar. A potion prepared from the bark is good for sciatica

[32] The *young* leaves probably, or else the fruit.

[33] In B. xvi. c. 24. There are still some traces of this notion existing, Fée says, among the French peasantry. All the statements here made relative to its medicinal properties, are utterly unfounded.

[34] In reality they have no such effect.

[35] See B. xvi. c. 26. The root of the maple, Fée says, has no marked qualities whatever.

[36] In B. xii. c. 61. The buds of the poplar, Fée says, are still used in medicine in the composition of an unguent known as "populeum." The bark is astringent, and the wood destitute of taste.

[37] "Uvarum." Fée thinks that by these berries, or grapes, the blossoms or buds are meant. See Note 91 to B. xii. c. 61

and strangury, and the juice of the leaves is taken warm for ear-ache. So long[38] as a person holds a sprig of poplar in his hand, there is no fear of[39] chafing between the thighs.

The black poplar which grows in Crete is looked upon as the most efficacious of them all. The seed of it, taken in vinegar, is good for epilepsy. This tree produces a resin also to a small extent, which is made use of for emollient plasters. The leaves, boiled in vinegar, are applied topically for gout. A moisture that exudes from the clefts of the black poplar removes warts, and pimples caused by friction. Poplars produce also on the leaves a kind of sticky[40] juice, from which bees prepare their propolis:[41] indeed this juice, mixed with water, has the same virtues as propolis.

### CHAP. 33.—THE ELM: SIXTEEN REMEDIES.

The leaves, bark, and branches of the elm[42] have the property of filling up wounds and knitting the flesh together: the inner membrane[43] too, of the bark, and the leaves, steeped in vinegar, are applied topically for leprosy. The bark, in doses of one denarius, taken in one hemina of cold water, acts as a purgative upon the bowels, and is particularly useful for carrying off pituitous and aqueous humours. The gum also which this tree produces is applied topically to gatherings, wounds, and burns, which it would be as well to foment with the decoction also. The moisture[44] which is secreted on the follicules of the tree gives a finer colour to the skin, and improves the looks. The foot-stalks of the leaves that first appear,[45] boiled in wine, are curative of tumours, and

[38] See also c. 38, as to the Vitex.

[39] This superstition probably applies to persons riding on horseback.

[40] "Guttam." This is the substance known to us as "honey-dew." It is either secreted by the plant itself, or deposited on the leaves by an aphis. It is found more particularly on the leaves of the rose, the plane, the lime, and the maple. Bees and ants are particularly fond of it.

[41] Bee-glue. See B. xi. c. 6, and B. xxii. c. 50.

[42] See B. xvi. c. 29. The bark of the elm, like that of most other trees, has certain astringent properties.

[43] Fée says that it is only some few years since the inner bark of the elm was sometimes prescribed medicinally, but that it has now completely fallen into disuse. All that Pliny says here of the virtues of the elm is entirely suppositious.

[44] A kind of honey-dew, no doubt.

[45] "Cauliculi foliorum primi."

bring them to a head :[46] the same, too, is the effect produced by the inner bark.

Many persons are of opinion that the bark of this tree, chewed, is a very useful application for wounds, and that the leaves, bruised and moistened with water, are good for gout. The moisture too that exudes from the pith of the tree, as already[47] stated, on an incision being made, applied to the head, causes the hair to grow and prevents it from falling off.

### CHAP. 34.—THE LINDEN-TREE : FIVE REMEDIES.

The linden-tree[48] is useful, though in a less marked degree, for nearly all the same purposes as the wild olive. The leaves, however, are the only part that is made use of for ulcers upon infants ; chewed, too, or employed in the form of a decoction, they are diuretic. Used as a liniment they arrest menstruation when in excess, and an infusion of them, taken in drink, carries off superfluous blood.

### CHAP. 35.—THE ELDER : FIFTEEN REMEDIES.

There are two kinds of elder, one of which grows wild and is much smaller than the other ; by the Greeks it is known as the "chamæacte," or "helion."[49] A decoction of the leaves,[50] seed, or root of either kind, taken in doses of two cyathi, in old wine, though bad for the upper regions of the stomach, carries off all aqueous humours by stool. This decoction is very cooling too for inflammations, those attendant upon recent burns in particular. A poultice is made also of the more

[46] "Extrahuntque per fistulas."

[47] In B. xvi. c. 74.

[48] See B. xvi. c. 25. The blossoms of the linden-tree are the only part of it employed in modern medicine. Fée thinks, with Hardouin, that Pliny has here attributed to the linden, or Philyra of the Greeks, the properties which in reality were supposed to belong to the Phillyrea latifolia, a shrub resembling the wild olive. Dioscorides, in his description of its properties, has not fallen into the same error.

[49] "Ground elder" or "marsh elder ;" the Sambucus ebulus of Linnæus, or dwarf elder. The other kind mentioned by Pliny is the Sambucus nigra of Linnæus, or black elder.

[50] Fée says that though some of the assertions as to its medicinal properties made by Pliny are unfounded, it is still an opinion among the moderns that the leaves of the elder are purgative, the inner bark an emetic and hydragogue, the berries laxative, and the flowers emollient.

tender leaves, mixed with polenta, for bites inflicted by dogs. The juice of the elder, used as a fomentation, reduces abscesses of the brain, and more particularly of the membrane which envelopes that organ. The berries, which have not so powerful an action as the other parts of the tree, stain the hair. Taken in doses of one acetabulum, in drink, they are diuretic. The softer leaves are eaten with oil and salt, to carry off pituitous and bilious secretions.

The smaller kind is for all these purposes the more efficacious of the two. A decoction of the root in wine, taken in doses of two cyathi, brings away the water in dropsy, and acts emolliently upon the uterus: the same effects are produced also by a sitting-bath made of a decoction of the leaves. The tender shoots of the cultivated kind, boiled in a saucepan and eaten as food, have a purgative effect: the leaves taken in wine, neutralize the venom of serpents. An application of the young shoots, mixed with he-goat suet, is remarkably good for gout; and if they are macerated in water, the infusion will destroy fleas. If a decoction of the leaves is sprinkled about a place, it will exterminate flies. "Boa"[51] is the name given to a malady which appears in the form of red pimples upon the body; for its cure the patient is scourged with a branch of elder. The inner bark,[52] pounded and taken with white wine, relaxes the bowels.

### CHAP. 36.—THE JUNIPER: TWENTY-ONE REMEDIES.

The juniper is of a warming and resolvent nature beyond all other plants: in other respects, it resembles the cedar.[53] There are two species of this tree, also, one of which is larger[54] than the other:[55] the odour of either, burnt, repels the ap-

[51] According to Hardouin, this would appear to be the measles; but according to Festus, swellings on the legs were so called. The shingles is probably the malady meant.

[52] Fée speaks of a decoction of the inner bark as having been recently in vogue for the cure of dropsy.

[53] This so-called cedar, Fée says, is in reality itself a juniper. The medicinal properties of all the varieties of the juniper are not identical. The essential oil of the leaves acts with a formidable energy upon the human system.

[54] This is identified by Fée with the Juniperus communis of Lamarck, variety $\alpha$, the Juniperus communis of Linnæus.

[55] Identified by Fée with the Juniperus nana of Willdenow, the Juniperus communis of Lamarck, variety $\beta$. The Spanish juniper, mentioned in B. xvi. c. 76, he identifies with the Juniperus thurifera of Linnæus.

proach of serpents.[56] The seed[57] is good for pains in the stomach, chest, and sides; it dispels flatulency and sudden chills, soothes cough, and brings indurations to a head. Applied topically, it checks the growth of tumours; and the berries, taken in red wine, act astringently upon the bowels: they are applied also to tumours of the abdomen. The seed is used as an ingredient in antidotes of an aperient nature, and is diuretic[58] in its effects. It is used as a liniment for defluxions of the eyes, and is prescribed for convulsions, ruptures, griping pains in the bowels, affections of the uterus, and sciatica, either in a dose of four berries in white wine, or in the form of a decoction of twenty berries in wine.

There are persons who rub the body with juniper berries as a preventive of the attacks of serpents.

CHAP. 37. (9.)—THE WILLOW: FOURTEEN REMEDIES. THE WILLOW OF AMERIA: ONE REMEDY.

The fruit of the willow,[59] before it arrives at maturity, is covered with a down like a spider's web: gathered[60] before it is ripe, it arrests discharges of blood from the mouth. The bark of the upper branches, reduced to ashes and mixed with water, is curative of corns and callosities: it removes spots also upon the face, being still more efficacious for that purpose if mixed with the juices of the tree.

The juices produced by the willow form three different varieties; one[61] of which exudes in the shape of a gum from

[56] Virgil says this of the fumes of the cedar, Georg. III. 414; an additional proof, Fée says, that under the name of "cedrus," the juniper was really meant. The smoke of the juniper is not known to have the effect upon serpents here described.

[57] The berries of the juniper contain sugar, mucilage, and a small proportion of essential oil; a rob is prepared from them, Fée says, under the name of "extract of juniper."

[58] It is a well-known fact, that juniper berries are diuretic; they impart also to the urine the odour of the violet, a property which is equally possessed by turpentine. All the other properties here attributed to the juniper, are, in Fée's opinion, either hypothetical or absurd.

[59] See B. xvi. c. 68.

[60] Neither this downy substance nor the seeds are now employed for any purpose. The bark of the willow has some strongly-pronounced properties, but all other parts of it are totally inert.

[61] A kind of manna, Fée says. The other juices here mentioned are secreted from the sap.

the tree itself, and another distils from an incision some three fingers in width, made in the bark while the tree is in blossom. This last is very useful for dispersing humours which impede the sight, acting also as an inspissative when needed, promoting the discharge of the urine, and bringing abscesses of all kinds to a head. The third kind of juice exudes from the wounds, when the branches are lopt off with the bill. Either of these juices, warmed in a pomegranate rind, is used as an injection for diseases of the ears. The leaves, too, boiled and beaten up with wax, are employed as a liniment for similar purposes, and for gout. The bark and leaves, boiled in wine, form a decoction that is remarkably useful as a fomentation for affections of the sinews. The blossoms, bruised with the leaves, remove scaly eruptions of the face; and the leaves, bruised and taken in drink, check libidinous tendencies,[62] and effectually put an end to them, if habitually employed.

The seed of the black willow of Ameria,[63] mixed with litharge in equal proportions, and applied to the body just after the bath, acts as a depilatory.

### CHAP. 38.—THE VITEX: THIRTY-THREE REMEDIES.

Not much unlike the willow, for the use that is made of it in wicker-work, is the vitex,[64] which also resembles it in the leaves and general appearance, though the smell of it is more agreeable. The Greeks call it "lygos," or "agnos,"[65] from the fact that the matrons of Athens, during the Thesmophoria,[66] a period when the strictest chastity is observed, are in the habit of strewing their beds with the leaves of this tree.

There are two species of vitex: the larger[67] one, like the willow, attains the full proportions of a tree; while the other,[68] which is smaller, is branchy, with a paler, downy leaf. The first kind, generally known as the "white" vitex, bears a

[62] The leaves have no effect whatever as an antaphrodisiac.

[63] See B. xvi. c. 69.

[64] The Vitex agnus castus of Linnæus, the tree of chastity.

[65] The "chaste" tree. It is no longer used in medicine; the fruit has somewhat the flavour of spice, Fée says, and taken internally it would have the converse of an antaphrodisiac effect. The other parts of it are quite inert.

[66] An Attic festival celebrated yearly in honour of Demeter, which lasted four or five days. It was also celebrated in other parts of Greece.

[67] The Vitex agnus castus of Lamarck, variety β, Elatior.

[68] The Vitex agnus castus of Linnæus, the type.

white blossom mixed with purple, whereas the black one has a flower that is entirely purple. Both of these trees grow on level spots of a marshy nature.

The seed of these trees, taken in drink, has a sort of vinous flavour, and has the reputation of being a febrifuge. It is said also to act as a sudorific, if the body is rubbed with it mixed with oil, and to have the effect of dispelling extreme lassitude: it acts too as a diuretic[69] and emmenagogue. The produce of both trees is trying to the head, like wine, and indeed the odour of them is very similar. They have the effect also of removing flatulence in the lower regions of the body, act astringently upon the bowels, and are remarkably useful for dropsy and affections of the spleen. They promote the secretion of the milk, and neutralize the venom of serpents, when of a cold nature more particularly. The smaller kind, however, is the more efficacious of the two for injuries inflicted by serpents, the seed being taken in doses of one drachma, in wine or oxycrate, or else the more tender leaves in doses of two drachmæ.

From both trees also a liniment is prepared for the bites of spiders, but it is quite sufficient to rub the wounds with the leaves; and if a fumigation is made from them, or if they are spread beneath the bed, they will repel the attacks of all venomous creatures. They act also as an antaphrodisiac, and it is by this tendency in particular that they neutralize the venom of the phalangium, the bite of which has an exciting effect upon the generative organs. The blossoms and young shoots, mixed with oil of roses, allay head-aches arising from inebriation. A decoction of the seed used as a fomentation cures head-ache, however intense it may be; and employed as a fumigation or as a pessary, the seeds acts as a detergent upon the uterus. Taken in drink with honey and penny-royal, it has a laxative effect; pounded and used with barley-meal, it quickly brings abscesses and hard tumours to a head, and has an emollient effect.

The seed, in combination with saltpetre and vinegar, removes lichens and freckles; mixed with honey, it heals ulcers and eruptions of the mouth; applied with butter and vine-leaves, it reduces swellings of the testes; used with water, as a lini-

[69] It may possibly, Fée says, have this effect, but the other properties here attributed to it are wholly imaginary.

ment, it cures chaps of the rectum; and employed with salt, nitre, and wax, it is good for sprains. The seed and leaves are used as ingredients also in emollient plasters for diseases of the sinews, and for gout; and a decoction of the seed in oil is employed as a fomentation for the head in cases of phrenitis and lethargy. Persons[70] who carry a sprig of this plant in the hand, or stuck in the girdle, will be proof, it is said, against chafing between the thighs.

### CHAP. 39.—THE ERICA; ONE REMEDY.

The Greeks give the name of "erice,"[71] to a shrub that is but little different from the myrice.[72] It has the colour, and very nearly the leaf, of rosemary. It neutralizes[73] the venom of serpents, it is said.

### CHAP. 40.—THE BROOM; FIVE REMEDIES.

The broom is used for making withes;[74] the flowers of it are greatly sought by bees. I have my doubts whether this is not the same plant that the Greek writers have called "sparton," and of which, in those parts of the world, as I have already[75] stated, they are in the habit of making fishing-nets. I doubt also whether Homer[76] has alluded to this plant, when he speaks of the seams of the ships,—"the sparta" coming asunder; for it is certain that in those times the spartum[77] of Spain or Africa was not as yet in use, and that vessels made of materials sown together, were united by the agency, not of spartum, but of flax.

[70] Travelling on horseback, probably. A similar superstition is mentioned as to the poplar, in c. 32 of this Book.

[71] Probably the Erica arborea of Linnæus; see B. xiii. c. 35. It has not, however, a leaf similar to that of rosemary, with the sole exception, Fée says, of the Erica cinerea of Linnæus.

[72] See B. xiii. c. 37.

[73] It has no such effect, in reality.

[74] See B. xvi. c. 69. The kind here alluded to is the Spanish broom, Fée thinks.

[75] In B. xix. c. 2. Vol. IV. p. 135.

[76] Iliad, B. ii. l. 135. See B. xix. c. 6, where Pliny states it as his opinion that in this passage Homer is speaking of flax.

[77] See B. xix. c. 7. Fée thinks that the plant under consideration in this Chapter is the Spanish broom, Genista juncea of Lamarck, the Spartium junceum of Linnæus, a different plant from the Spartum of B. xix. c. 7, the Stipa tenacissima of Linnæus. He is of opinion also, that Homer in the passage referred to alludes, not to flax, but to the Genista juncea. See this question further discussed, in the additional Note at the end of B. xxvii.

The seed of the plant to which the Greeks now give the name of "sparton," grows in pods like those of the kidney-bean. It is as strongly drastic[78] as hellebore, and is usually taken fasting, in doses of one drachma and a half, in four cyathi of hydromel. The branches also, with the foliage, are macerated for several days in vinegar, and are then beaten up, the infusion being recommended for sciatica, in doses of one cyathus. Some persons think it a better plan, however, to make an infusion of them in sea-water, and to inject it as a clyster. The juice of them is used also as a friction for sciatica, with the addition of oil. Some medical men, too, make use of the seed for strangury. Broom, bruised with axle-grease, is a cure for diseases of the knees.

### CHAP. 41.—THE MYRICA, OTHERWISE CALLED TAMARICA, OR TAMARIX: THREE REMEDIES.

Lenæus says, that the myrice,[79] otherwise known as the "erica," is a similar plant to that of which brooms are made at Ameria.[80] He states also that, boiled in wine and then beaten up and applied with honey, it heals carcinomatous sores. I would here remark, parenthetically, that some persons identify it with the tamarice. Be this as it may, it is particularly useful for affections of the spleen, the juice of it being extracted for the purpose, and taken in wine; indeed so marvellous, they say, is its antipathy to this part of the viscera, and this only, that if swine drink from troughs made of this wood,[81] they will be found to lose the spleen. Hence it is that

[78] Fée says that the blossoms and seed of the junciform genista and other kinds are of a purgative nature; indeed, one variety has been called the Genista purgans by Lamarck. None of them, however, are so potent in their effects as Pliny in the present passage would lead us to suppose.

[79] See B. xiii. c. 37, and Note 96; where it is stated that, in Fée's opinion, several plants were united by the ancients under this one collective name—brooms for instance, heaths, and tamarisks. He thinks, however, that under the name "Myrica," Pliny may possibly have intended to comprehend the larger heaths and the Tamarix Gallica of Linnæus. M. Fraas, as Littré states, gives the Tamarix Africana as the probable synonym of the Myrica of Pliny.

[80] Of this broom-plant of Ameria nothing is known.

[81] This *cannot* apply to any of the heaths of Europe. The tamarisk grows to a much larger size, and barrels and drinking vessels are made of the wood.

in maladies of the spleen victuals and drink are given to the patient in vessels made of this wood.

A medical author too, of high repute,[82] has asserted that a sprig broken from off this tree, without being allowed to touch the earth or iron, will allay pains in the bowels, if applied to the body, and kept close to it by the clothes and girdle. The common people, as already[83] stated, look upon this tree as ill-omened, because it bears no fruit, and is never propagated from seed.

### CHAP. 42.—THE BRYA: TWENTY-NINE REMEDIES.

At Corinth, and in the vicinity of that city, the Greeks give the name of "brya"[84] to a plant of which there are two varieties; the wild brya,[85] which is altogether barren, and the cultivated one.[86] This last, when found in Syria and Egypt, produces a ligneous fruit, somewhat larger than a gall-nut, in great abundance, and of an acrid flavour; medical men employ it as a substitute for galls in the compositions known as "antheræ."[87] The wood also, with the blossoms, leaves, and bark of the tree, is used for similar purposes, but their properties are not so strongly developed. The bark is pounded also, and given for[88] discharges of blood from the mouth, irregularities of the catamenia, and cœliac affections: beaten up and applied to the part affected, it checks the increase of all kinds of abscesses.

The juice too is extracted from the leaves for similar purposes, and a decoction is made of them in wine; they are applied also to gangrenes, in combination with honey. A decoction of them taken in wine, or the leaves themselves applied with oil of roses and wax, has a sedative effect: it is in this form that they are used for the cure of epinyctis. This decoction is useful also for tooth-ache or ear-ache, and the root

[82] "Gravis." He does not, however, show his *gravity* in the present instance.

[83] In B. xvi. c. 45.

[84] See B. xiii. c. 37.

[85] Identified by Fée with the Tamarix Gallica.

[86] The "brya," spoken of in B. xiii. c. 37, as growing in Achaia also, the Tamarix orientalis of Delille. But *there* he implies that it does not produce any fruit when it grows in Egypt.

[87] "Flower compositions."

[88] It may possibly be of some use for this purpose, being of an astringent nature.

is employed for similar purposes. The leaves too have this additional use—they are applied with polenta to serpiginous sores. The seed, in doses of one drachma, is administered in drink for injuries inflicted by spiders or the phalangium; and mixed with the grease of poultry, it is applied to boils. It is very efficacious also for stings inflicted by all kinds of serpents, the asp excepted. The decoction, used as a fomentation, is curative of jaundice, phthiriasis, and lice; it also arrests the catamenia when in excess. The ashes of the tree are employed for all these purposes; there is a story told, too, that, mixed with the urine of an ox, and taken in the food or drink, they will act most effectually as an antaphrodisiac. The charcoal too of this wood is quenched in urine of a similar nature, and kept in a shady spot. When it is the intention of the party to rekindle the flames[89] of desire, it is set on fire again. The magicians say,[90] that the urine of an eunuch will have a similar effect.

### CHAP. 43.—THE BLOOD-RED SHRUB: ONE REMEDY.

Nor is the blood-red[91] shrub looked upon as a less ill-omened[92] plant than the last. The inner bark of it is used to re-open ulcers which have healed too rapidly.

### CHAP. 44.—THE SILER: THREE REMEDIES.

The leaves of the siler,[93] applied to the forehead, allay head-ache; and the seed of it, beaten up with oil, is curative of phthiriasis. Serpents also are greatly in dread of this tree, and it is for this reason that the country-people are in the habit of carrying a walking-stick made of it.

[89] This seems to be the meaning of "Idem cum libeat accendere resolvitur," though in the French translations it is rendered, "It crumbles into ashes when an attempt is made to kindle it." Holland seems to have rightly understood the passage, which probably bears reference to some current superstition.

[90] "Magi." He probably alludes in this passage to the Magi of the East.

[91] See B. xvi. cc. 30, 43.

[92] The cornel, probably. It was looked upon as "infelix," or ill-omened, because it was sacred to the Deities of the infernal regions.

[93] See B. xvi. c. 31. If this is the Salix vitellina, Fée says, all that Pliny here states as to its medicinal properties does not merit the slightest attention.

CHAP. 45.—THE PRIVET: EIGHT REMEDIES.

The ligustrum, or privet, if it is the same tree as the cyprus[93] of the East, has also its own medicinal uses in Europe. The juice of it is used for affections of the sinews and joints, and for sudden chills; and the leaves are universally employed, with a sprinkling of salt, for the cure of inveterate sores and of ulcerations of the mouth. The berries are curative of phthiriasis and chafings between the thighs, for which last purpose the leaves also are employed. The berries are made use of for the cure of pip in poultry.[94]

CHAP. 46.—THE ALDER: ONE REMEDY.

The leaves of the alder, steeped in boiling water, are an undoubted remedy for tumours.

CHAP. 47.—THE SEVERAL VARIETIES OF THE IVY: THIRTY-NINE REMEDIES.

We have already[95] enumerated some twenty varieties of the ivy. The medicinal properties of them all are of a doubtful nature; taken in considerable quantities they disturb the mental faculties and purge the brain. Taken internally they are injurious to the sinews,[96] but applied topically they are beneficial to those parts of the body. Ivy possesses properties similar[97] to those of vinegar. All the varieties of the ivy are of a refrigerative nature, and taken in drink they are diuretic. The softer leaves, applied to the head, allay head-ache, acting more particularly upon the brain and the membrane which envelopes that organ. For this purpose the leaves are bruised with vinegar and oil of roses and then boiled, after which some more rose-oil is added. The leaves too are applied to the fore-

[93] See B. xii. c. 51. The botanical characteristics, Fée says, and the medicinal properties of the privet, differ essentially from those of the Cypros or Lawsonia inermis. The leaves of the privet are bitter and astringent.

[94] Fée says, that on reading this passage it is impossible to preserve one's gravity.

[95] In B. xvi. c. 62. The ivy is but little used for any of the purposes of modern medicine. It is said by some authorities that a decoction of the leaves will kill vermin, and that the berries are purgative and emetic.

[96] "Nervis."

[97] Fée states that in reality no such similarity exists; but that acetic acid is sometimes developed by the rapid fermentation of the juices of a great number of vegetable substances.

head, and the mouth is fomented with a decoction of them, with which the head is rubbed as well. They are useful also for the spleen, the leaves being applied topically, or an infusion of them taken in drink. A decoction of them is used for cold shiverings in fevers, and for pituitous eruptions; or else they are beaten up in wine for the purpose. The umbels too, taken in drink or applied externally, are good for affections of the spleen, and an application of them is useful for the liver; employed as a pessary, they act as an emmenagogue.

The juice of the ivy, the white cultivated kind more particularly, cures diseases of the nostrils and removes habitually offensive smells. Injected into the nostrils it purges the head, and with the addition of nitre it is still more efficacious for that purpose. In combination with oil, the juice is injected for suppurations or pains in the ears. It is a corrective also of the deformities of scars. The juice of white ivy, heated with the aid of iron, is still more efficacious for affections of the spleen; it will be found sufficient, however, to take six of the berries in two cyathi of wine. Three berries of the white ivy, taken in oxymel, expel tape-worm, and in the treatment of such cases it is a good plan to apply them to the abdomen as well. Erasistratus prescribes twenty of the golden-coloured berries of the ivy which we have-mentioned as the "chrysocarpos,"[98] to be beaten up in one sextarius of wine, and he says that if three cyathi of this preparation are taken for dropsy, it will carry off by urine the water that has been secreted beneath the skin. For cases of tooth-ache he recommends five berries of the chrysocarpos to be beaten up in oil of roses, and warmed in a pomegranate-rind, and then injected into the ear opposite the side affected. The berries which yield a juice of a saffron colour, taken beforehand in drink, are a preservative against crapulence; they are curative also of spitting of blood and of griping pains in the bowels. The whiter umbels of the black ivy, taken in drink, are productive of sterility, in males even. A decoction in wine of any kind of ivy is useful as a liniment for all sorts of ulcers, those even of the malignant kind known as "cacoethes." The tears[99] which distil from the ivy are used

[98] "Golden fruit." See B. xvi. c. 62.

[99] The same substance which he speaks of at the end of this Chapter as the gum of ivy, called "hederine," Fée says, in modern chemistry. It is a gum resin, mixed with ligneous particles.

as a depilatory, and for the cure of phthiriasis. The blossoms too, of all the varieties, taken twice a day in astringent wine, a pinch in three fingers at a time, are curative of dysentery and looseness of the bowels: they are very useful also, applied to burns with wax. The umbels stain the hair black. The juice extracted from the root is taken in vinegar for the cure of wounds inflicted by the phalangium. I find it stated too, that patients suffering from affections of the spleen are cured by drinking from vessels made of the wood of the ivy. The berries are bruised also, and then burnt, and a liniment is prepared from them for burns, the parts being fomented with warm water first.

Incisions are sometimes made in the ivy to obtain the juice, which is used for carious teeth, it having the effect of breaking them, it is said; the adjoining teeth being fortified with wax against the powerful action of the juice. A kind of gum even is said to be found in the ivy, which, it is asserted, is extremely useful, mixed with vinegar, for the teeth.

CHAP. 48.—THE CISTHOS: FIVE REMEDIES.

The Greeks give the name of "cisthos"—a word very similar to "cissos," the Greek name of the ivy—to a plant which is somewhat larger than thyme, and has a leaf like that of ocimum. There are two varieties of this plant; the male,[1] which has a rose-coloured blossom, and the female,[2] with a white one. The blossom of either kind, taken in astringent wine, a pinch in three fingers at a time, is good for dysentery and looseness of the bowels. Taken in a similar manner twice a day, it is curative of inveterate ulcers: used with wax, it heals burns, and employed by itself it cures ulcerations of the mouth. It is beneath these plants more particularly that the hypocisthis grows, of which we shall have occasion[3] to speak when treating of the herbs.

CHAP. 49.—THE CISSOS ERYTHRANOS: TWO REMEDIES. THE CHAMÆCISSOS: TWO REMEDIES. THE SMILAX: THREE REMEDIES. THE CLEMATIS: EIGHTEEN REMEDIES.

The plant called "cissos erythranos"[4] by the Greeks, is

[1] The Cistus pilosus of Linnæus, the wild eglantine, or rock-rose.

[2] The Cistus salvifolius of Linnæus.

[3] In B. xxvi. cc. 31, 49, 87, and 90.

[4] "Red-berried" or "red-leaved ivy." See B. xvi. c. 62. This kind, Fée says, appears not to have been identified.

similar to the ivy: taken in wine, it is good for sciatica and lumbago. The berries, it is said, are of so powerful a nature as to produce bloody urine. "Chamæcissos"[5] also is a name given by them to a creeping ivy which never rises from the surface of the ground: bruised in wine, in doses of one acetabulum, it is curative of affections of the spleen, the leaves of it being applied topically with axle-grease to burns.

The smilax[6] also, otherwise known as the "anthophoros,"[7] has a strong resemblance to ivy, but the leaves of it are smaller. A chaplet, they say, made of an uneven number of the leaves, is an effectual cure for head-ache. Some writers mention two kinds of smilax, one of which is all but perennial, and is found climbing the trees in umbrageous valleys, the berries hanging in clusters. These berries, they say, are remarkably efficacious for all kinds of poisons; so much so indeed, that infants to whom the juice of them has been habitually administered, are rendered proof against all poisons for the rest of their life. The other kind, it is said, manifests a predilection for cultivated localities, and is often found growing there; but as for medicinal properties, it has none. The former kind, they say, is the smilax, the wood of which we have mentioned[8] as emitting a sound, if held close to the ear.

Another plant, similar to this, they call by the name of "clematis:"[9] it is found adhering to trees, and has a jointed stem. The leaves of it cleanse leprous[10] sores, and the seed acts as an aperient, taken in doses of one acetabulum, in one hemina of water, or in hydromel. A decoction of it is prescribed also for a similar purpose.

### CHAP. 50. (11.)—THE REED: NINETEEN REMEDIES.

We have already[11] treated of twenty-nine varieties of the reed, and there is none of her productions in which that

[5] "Ground-ivy." See B. xvi. c. 62, Note 17. M. Fraäs adopts Sprengel's opinion that it is the Antirrhinum Azarina, the bastard asarum.

[6] See B. xvi. c. 63.

[7] "Flower-bearer."

[8] In B. xvi. c. 63.

[9] Sprengel thinks that this is the Clematis viticella, but Fée identifies it with the Clematis vitalba of Linnæus, the climber, or traveller's joy.

[10] The leaves of it, Fée says, are of a caustic nature, and have been employed before now by impostors for producing sores on the skin of a frightful appearance, but easily healed.

[11] In B. xvi. c. 34.

mighty power of Nature,[12] which in our successive Books we have described, is more fully displayed than in this. The root of the reed, pounded and applied to the part affected, extracts the prickles of fern from the body, the root of the fern having a similar effect upon splinters of the reed. Among the numerous varieties which we have described, the scented reed[13] which is grown in Judæa and Syria as an ingredient in our unguents, boiled with hay-grass or parsley-seed, has a diuretic effect: employed as a pessary, it acts as an emmenagogue. Taken in drink, in doses of two oboli, it is curative of convulsions, diseases of the liver and kidneys, and dropsy. Used as a fumigation, and with resin more particularly, it is good for coughs, and a decoction of it with myrrh is useful for scaly eruptions and running ulcers. A juice, too, is collected from it which has similar properties to those of elaterium.[14]

In every kind of reed the part that is the most efficacious is that which lies nearest the root; the joints also are efficacious in a high degree. The ashes of the Cyprian reed known as the "donax,"[15] are curative of alopecy and putrid ulcers. The leaves of it are also used for the extraction[16] of pointed bodies from the flesh, and for erysipelas and all kinds of gatherings. The common reed, beaten up quite fresh, has also considerable extractive powers, and not in the root only, for the stem, it is said, has a similar property. The root is used also in vinegar as a topical application for sprains and for pains in the spine; and beaten up fresh and taken in wine it acts as an aphrodisiac. The down that grows on reeds, put into the ears, deadens the hearing.[17]

### CHAP. 51.—THE PAPYRUS, AND THE PAPER MADE FROM IT: THREE REMEDIES.

Of a kindred nature with the reed is the papyrus[18] of Egypt; a plant that is remarkably useful, in a dried state, for

[12] Sympathies and antipathies existing in plants. See c. 1 of this Book.

[13] Not a reed, Fée thinks, but some other monocotyledon that has not been identified. See B. xii. c. 48.

[14] See B. xx. c. 3.

[15] See B. xvi. c. 66.

[16] Celsus also speaks of the root of the reed as being efficacious for this purpose, B. v. c. 26.

[17] Fée says that neither of these last assertions is true.

[18] See B. xiii. c. 21. It is no longer used in medicine.

dilating and drying up fistulas, and, by its expansive powers, opening an entrance for the necessary medicaments. The ashes[19] of paper prepared from the papyrus are reckoned among the caustics: those of the plant, taken in wine, have a narcotic effect. The plant, applied topically in water, removes callosities of the skin.

### CHAP. 52.—THE EBONY: FIVE REMEDIES.

The ebony-tree[20] does not grow in Egypt even, as we have already stated, and it is not our intention to speak here of the medicinal properties of the vegetable productions of foreign climates. Still, however, the ebony must not be omitted, on account of the marvels related of it. The saw-dust of this wood, it is said, is a sovereign remedy for diseases of the eyes, and the pulp of the wood, rubbed upon a whetstone moistened with raisin wine, dispels all films which impede the sight. The root too, they say, applied with water, is curative of white specks in the eyes, and, with the addition of root of dracunculus,[21] in equal proportions, and of honey, of cough. Medical men reckon ebony also in the number of the caustics.[22]

### CHAP. 53—THE RHODODENDRON: ONE REMEDY.

The rhododendron[23] has not so much as found a Latin name among us, its other names being "rhododaphne"[24] and "nerium." It is a marvellous fact, but the leaves[25] of this plant are poisonous to quadrupeds; while for man, if taken in wine with rue, they are an effectual preservative against the venom of serpents. Sheep too, and goats, it is said, if they drink water in which the leaves have been steeped, will die immediately.

[19] These statements as to the virtues of the ashes of papyrus, Fée says, are absurd.

[20] See B. xii. c. 8. Desfontaines is inclined to identify the tree here spoken of with the Diospyros ebenaster of Kœnig.

[21] See c. 91 of this Book; the Artemisia dracunculus of Linnæus.

[22] "Erodentia." Fée remarks upon the singularity, that with this property attributed to it, it should be recommended for diseases of the eyes.

[23] The "rose-tree." Our rose-bay or oleander. [24] "Rose-laurel."

[25] See B. xvi. c. 33. It is, Fée says, an energetic poison, but as injurious to man as it is to animals.

CHAP. 54.—THE RHUS OR SUMACH-TREE; TWO VARIETIES OF IT: EIGHT REMEDIES. STOMATICE.

Nor yet has the tree called "rhus"[26] any Latin name, although it is employed in numerous ways. Under this name are comprehended a wild plant,[27] with leaves like those of myrtle, and a short stem, which is good as an expellent of tapeworm; and the shrub[28] which is known as the "currier's plant," of a reddish colour, a cubit in height, and about the thickness of one's finger, the leaves of which are dried and used, like pomegranate rind, for curing leather.

Medical men also employ the leaves of these plants for the treatment of contusions, and for the cure of cœliac affections, and of ulcers of the rectum and phagedænic sores; for all which purposes they are pounded with honey and applied with vinegar. A decoction of them is injected for suppurations of the ears. With the branches, boiled, a stomatice[29] is also made, which is used for the same purposes as that prepared from mulberries;[30] it is more efficacious, however, mixed with alum. This preparation is applied also to reduce the swelling in dropsy.

CHAP. 55.—RHUS ERYTHROS: NINE REMEDIES.

Rhus[31] erythros is the name given to the seed of this shrub. It possesses properties of an astringent and cooling nature, and is used as a seasoning[32] for provisions, in place of salt. It has a laxative effect, and, used in conjunction with silphium, it gives a finer flavour to meat of all kinds. Mixed with honey, it is curative of running ulcers, pimples on the tongue,[33] contusions, bruises, and excoriations. It causes ulcers of the head to cicatrize with the greatest rapidity; and taken with the food, it arrests excessive menstruation.

CHAP. 56.—THE ERYTHRODANUS: ELEVEN REMEDIES.

The erythrodanus,[34] by some called "ereuthodanus," and

[26] See B. xiii. c. 13. The sumach-tree; the Rhus coriaria of Linnæus.
[27] Identified by Fée with the Coriaria myrtifolia of Linnæus, or myrtle-leaved sumach. It is used in the preparation of leather, Fée says, and is intensely poisonous.
[28] The sumach-tree.
[29] Or "mouth-medicine." See B. xxii. c. 11, and B. xxiii. cc. 58 and 71.
[30] See B. xxiii. c. 71.
[31] Or "ros." See B. xiii. c. 13.
[32] Fée says that this is still done in some parts of Turkey.
[33] "Asperitati linguæ."
[34] "Red rose;" our madder. See B. xix. c. 17. Beckmann is of

in Latin, "rubia," is quite a different plant. It is used for dyeing wool, and skins for leather are prepared with it. Used medicinally, it is a diuretic, and, employed with hydromel, it is curative of jaundice.[35] Employed topically with vinegar, it heals lichens; and a potion is prepared from it for sciatica and paralysis, the patient while using it taking a bath daily. The root of it and the seed are effectual as an emmenagogue; they act astringently upon the bowels, and disperse gatherings. The branches, together with the leaves, are applied to wounds inflicted by serpents; the leaves too have the property of staining the hair.[36] I find it stated by some writers that this shrub is curative of jaundice, even if worn as an amulet only, and looked at every now and then.

### CHAP. 57.—THE ALYSSON: TWO REMEDIES.

The plant known as the "alysson"[37] differs only from the preceding one in the leaves and branches, which are more diminutive. It receives its name from the fact, that, taken in vinegar and worn as an amulet, it prevents persons bitten by dogs from becoming rabid. It is a marvellous fact too, that is added, to the effect that the person bitten has only to look at this shrub, and the flow of corrupt matter from the wound will be staunched immediately.

### CHAP. 58.—THE RADICULA OR STRUTHION: THIRTEEN REMEDIES. THE APOCYNUM: TWO OBSERVATIONS UPON IT.

The radicula, which we have already[38] mentioned as being called "struthion" by the Greeks, is used by dyers for preparing wool. A decoction of it, taken internally, is curative of jaundice and diseases of the chest. It is diuretic also, and laxative, and acts as a detergent upon the uterus, for which reasons medical men have given it the name of the "golden

opinion that the "sandix" of B. xxxv. c. 12, is our madder, and identical with the Rubia. It is not improbable, however, that in reality it was a mineral. See Beckmann's *Hist. Inv.* Vol. II. p. 110, *Bohn's Ed.*

[35] Fée says that it does not possess this property.

[36] Madder has no colouring matter which can produce any effect upon the hair.

[37] Or "anti-frantic" plant. C. Bauhin identifies it with the Rubia silvestris lævis, or wild madder; Fée is at a loss for its identification, but is inclined to think that it was a species of cultivated madder.

[38] In B. xix. c. 18. The Gypsophila struthium, or soap-plant, possibly. Its identity is discussed at great length by Beckmann, *Hist. Inv.* Vol. II. p. 98—102, *Bohn's Ed.*

beverage."[39] Taken with honey, it is a sovereign remedy for cough; and it is used for hardness of breathing, in doses of a spoonful. Applied with polenta and vinegar to the parts affected, it removes leprous sores. Used with panax and root of the caper-plant, it breaks and expels calculi, and a decoction of it in wine with barley-meal disperses inflamed tumours. It is used as an ingredient in emollient plasters and eye-salves for the sight, and is found to be one of the most useful sternutories known; it is good too for the liver and the spleen. Taken in hydromel, in doses of one denarius, it effects the cure of asthma, as also of pleurisy and all pains in the sides.

The apocynum[40] is a shrub with leaves like those of ivy, but softer, and not so long in the stalk, and the seed of it is pointed and downy, with a division running down it, and a very powerful smell. Given in their food with water, the seed is poisonous[41] to dogs and all other quadrupeds.

### CHAP. 59.—ROSEMARY: EIGHTEEN REMEDIES.

There are two kinds of rosemary; one of which is barren, and the other has a stem with a resinous seed, known as "cachrys." The leaves have the odour of frankincense.[42] The root, applied fresh, effects the cure of wounds, prolapsus of the rectum, condylomata, and piles. The juice of the plant, as well as of the root, is curative of jaundice, and such diseases as require detergents; it is useful also for the sight. The seed is given in drink for inveterate diseases of the chest, and, with wine and pepper, for affections of the uterus; it acts also as an emmenagogue, and is used with meal of darnel as a liniment for gout. It acts also as a detergent upon freckles, and is used as an application in diseases which require calorifics or sudorifics, and for convulsions. The plant itself, or else the root, taken in wine, increases the milk, and the leaves and stem of the plant are applied with vinegar to scrofulous sores; used with honey, they are very useful for cough.

[39] "Aureum poculum."

[40] Desfontaines says that it is the Periploca angustifolia; Fée gives the Apocynum folio subrotundo of C. Bauhin, round leafed dogsbane.

[41] This is the fact; and hence one of its names "cynanche," or "dog-strangle."

[42] This, Fée says, is the fact. The plant is rich in essential oil, and is consequently a powerful excitant. See B. xix. c. 62.

CHAP. 60.—THE SEED CALLED CACHRYS.

As already[43] stated, there are several kinds of cachrys;[44] but that which is produced by rosemary above-mentioned, when rubbed, is found to be of a resinous nature. It neutralizes poisons and the venom of animals, that of serpents excepted. It acts also as a sudorific, dispels griping pains in the bowels, and increases the milk in nursing women.

CHAP. 61.—THE HERB SAVIN: SEVEN REMEDIES.

Of the herb savin, known as "brathy" by the Greeks,[45] there are two varieties, one of them[46] with a leaf like that of the tamarix, the other[47] with that of the cypress; for which reason some persons have called this last the Cretan cypress. It is used by many for fumigations, as a substitute for frankincense;[48] employed in medicine, it is said to have the same effect as cinnamon, if taken in doses twice as large. It reduces gatherings, disperses corrosive sores, acts as a detergent upon ulcers, and, used as a pessary and as a fumigation, brings away the dead fœtus.[49] It is employed as a topical application for erysipelas and carbuncles, and, taken with honey in wine, is curative of jaundice.

The smoke of this plant, they say, cures the pip in all kinds of poultry.[50]

CHAP. 62.—SELAGO: TWO REMEDIES.

Similar to savin is the herb known as "selago."[51] Care is

[43] In B. xvi. c. 11.

[44] A gall or fungoid production, or, in some instances, a catkin. Fée says that Pliny has committed an error here in attributing a cachrys to rosemary, the Libanotis stephanomaticos, which, in reality, belongs to the Libanotis canchryphorus or Libanotis prima.

[45] So called from the Greek βραδύ, "slow," according to some authorities; by reason of the slowness of its growth.

[46] Identified by Fée with the Sabina vulgatior of Lobelius, or Juniperus Sabina, variety β, of Lamarck.

[47] The Sabina baceifera of J. Bauhin, the male savin, the type of the plant.

[48] See Ovid's Fasti, B. i. l. 341, as to this custom, and Virgil's "Culex," l. 403.

[49] It is still a common notion, though Fée says an ill-founded one, that it produces abortion. Indeed we find Galen stating to the same effect.

[50] Fée ridicules this notion with considerable zest.

[51] The Lycopodium selago of Linnæus, upright club-moss, or fir-moss,

taken to gather it without the use of iron, the right hand being passed for the purpose through the left sleeve of the tunic, as though the gatherer were in the act of committing a theft.[52] The clothing too must be white, the feet bare and washed clean, and a sacrifice of bread and wine must be made before gathering it: it is carried also in a new napkin. The Druids of Gaul have pretended that this plant should be carried about the person as a preservative against accidents of all kinds, and that the smoke of it is extremely good for all maladies of the eyes.

### CHAP. 63.—SAMOLUS: TWO REMEDIES.

The Druids, also, have given the name of "samolus"[53] to a certain plant which grows in humid localities. This too, they say, must be gathered fasting with the left hand, as a preservative against the maladies to which swine and cattle are subject. The person, too, who gathers it must be careful not to look behind him, nor must it be laid anywhere but in the troughs from which the cattle drink.

### CHAP. 64.—GUM: ELEVEN REMEDIES.

We have already[54] spoken of the different kinds of gum; the better sort of each kind will be found the most effective. Gum is bad for the teeth; it tends to make the blood coagulate, and is consequently good for discharges[55] of blood from the mouth. It is useful for burns,[56] but is bad for diseases of the trachea. It exercises a diuretic effect, and tends to neutralize all acridities, being astringent in other respects. The gum of the bitter-almond tree, which has the most[57]

according to Sprengel. Fée, however, dissents from that opinion, for the Lycopodium, he says, is but some three inches in height, while savin, with which the Selago is here compared, is more than eight or ten feet high. De Théis (*Gloss. Botan.*) thinks that it must have been a succulent plant; but upon what grounds he bases that conjecture, Fée declares himself at a loss to conjecture.

[52] Evidently a superstition derived from the Druids.

[53] Sprengel thinks that it is the Samolus Valerandi of Linnæus, the round-leaved water-pimpernel, and Anguillara identifies it with the Anemone pulsatilla, or pasque-flower. Fée inclines to the opinion that it is the Veronica beccabunga of Linnæus, the brook-lime.

[54] In B. xiii. c. 20.

[55] Gum is still used, Fée says, for this purpose.

[56] It is of no use whatever for burns, or as a diuretic.

[57] Fée says that it is not different in any way from the gum of other trees.

astringent properties of them all, is calorific also in its effects. Still, however, the gum of the plum, cherry, and vine is greatly preferred: all which kinds, applied topically, are productive of astringent and desiccative effects, and, used with vinegar, heal lichens upon infants. Taken in must, in doses of four oboli, they are good for inveterate coughs.

It is generally thought that gum, taken in raisin wine, improves the complexion,[58] sharpens the appetite, and is good for calculi[59] in the bladder. It is particularly useful too for wounds and affections of the eyes.

### CHAP. 65. (12.)—THE EGYPTIAN OR ARABIAN THORN: FOUR REMEDIES.

When speaking[60] of the perfumes, we have descanted upon the merits of the Egyptian or Arabian thorn. This, too, is of an astringent nature, and acts as a desiccative upon fluxes of all kinds, discharges of blood from the mouth, and excessive menstruation; for all which purposes the root is still more efficacious.

### CHAP. 66.—THE WHITE THORN: TWO REMEDIES. THE ACANTHION; ONE REMEDY.

The seed of the white thorn is useful as a remedy for the stings of scorpions, and a chaplet made of it, is good for headache. Similar to this plant is that known to the Greeks as the "acanthion;"[61] though it is much smaller in the leaf, which is pointed at the extremity, and covered with a down like a cobweb in appearance. This downy substance is gathered in the East, and certain textures are made of it similar to those of silk. An infusion of the leaves or root of this plant is taken for the cure of opisthotony.

### CHAP. 67.—GUM ACACIA: EIGHTEEN REMEDIES.

Gum acacia is produced also from the white and black[62]

[58] Fée remarks, that gum is injurious as a cosmetic.

[59] Gum is of no use whatever in such a case.

[60] In B. xiii. c. 19. In speaking there, however, of this gum, the Acacia Nilotica of Linnæus, he makes no mention whatever of Arabia; for which reason Sillig concludes that this passage is corrupt.

[61] The Onopordum acanthium of Linnæus, the cotton-thistle, or woolly thistle.

[62] The Mimosa Nilotica of Linnæus; see B. xiii. c. 19. Fée seems inclined to identify the white thorn with the Cratægus oxyacantha of Lin-

thorns of Egypt, and from a green thorn as well; the produce, however, of the former trees is by far the best. There is also a similar gum found in Galatia, but of very inferior quality, the produce of a more thorny tree[63] than those last mentioned. The seed of all these trees resembles[64] the lentil in appearance, only that it is smaller, as well as the pod which contains it: it is gathered in autumn, before which period it would be too powerful in its effects. The juice is left to thicken in the pods, which are steeped in rain-water for the purpose, and then pounded in a mortar; after which, the juice is extracted by means of presses. It is then dried in the mortars in the sun, and when dry is divided into tablets. A similar juice is extracted from the leaves, but it is by no means[65] so useful as the other. The seed is used also, as a substitute for nut-galls in curing leather.[66]

The juice extracted from the leaves, as also the extremely black juice of the Galatian[67] acacia, is held in no esteem. The same too with that of a deep red colour. The gum which is of a purple, or of an ashy, grey colour, and which dissolves with the greatest rapidity, possesses the most astringent and cooling qualities of them all, and is more particularly useful as an ingredient in compositions for the eyes. When required for these purposes, the tablets are steeped in water by some, while some again scorch them, and others reduce them to ashes. They are useful for dyeing the hair, and for the cure of erysipelas, serpiginous sores, ulcerations of the humid parts of the body, gatherings, contusions of the joints, chilblains, and hangnails. They are good also for cases of excessive menstruation, procidence of the uterus and rectum, affections of the eyes, and ulcerations of the generative organs[68] and mouth.

næus, the white hawthorn, or May. In the present passage, however, it is doubtful whether the colours apply to the varieties of gum, or to the trees which produce them. Sillig considers the passage to be corrupt.

[63] The Prunus spinosa of Linnæus, Fée thinks, the sloe, or black thorn.

[64] Fée says that the difference in appearance is very considerable between them.

[65] The leaves containing little or no tannin.

[66] In India, the bark of the Acacia Arabica is still used for tanning leather.

[67] This juice, Fée says, obtained from the Prunus spinosa, is known at the present day in commerce by the name of Acacia nostras.

[68] Fée queries, without sufficient foundation, it would appear, whether he is here speaking of syphilitic affections.

CHAP. 68. (13.)—ASPALATHOS: ONE REMEDY.

The common[69] thorn too, with which the fulling coppers are filled, is employed for the same purposes as the radicula.[70] In the provinces of Spain it is commonly employed as an ingredient in perfumes and unguents, under the name of "aspalathos." There is no doubt, however, that there is also a wild thorn of the same name in the East, as already mentioned,[71] of a white colour, and the size of an ordinary tree.

CHAP. 69.—THE ERYSISCEPTRUM, ADIPSATHEON, OR DIAXYLON: EIGHT REMEDIES.

There is also found in the islands of Nisyros and of Rhodes, a shrub of smaller size, but full as thorny, known by some as the erysisceptrum,[72] by others as the adipsatheon, and by the Syrians as the diaxylon. The best kind is that which is the least[73] ferulaceous in the stem, and which is of a red colour, or inclining to purple, when the bark is removed. It is found growing in many places, but is not everywhere odoriferous. We have already[74] stated how remarkably sweet the odour of it is, when the rainbow has been extended over it.

This plant cures fetid ulcers of the mouth, polypus[75] of the nose, ulcerations or carbuncles of the generative organs, and chaps; taken in drink it acts as a carminative, and is curative of strangury. The bark is good for patients troubled with discharges of blood, and a decoction of it acts astringently on the bowels. It is generally thought that the wild plant is productive of the same effects.

[69] Fée suggests that this may be the Dipsacus fullonum of Linnæus, the fuller's thistle.

[70] See B. xix. c. 18, and c. 58 of this Book.

[71] In B. xii. c. 52. But in that passage he makes the Aspalathos to be *identical* with the Erysisceptrum, which he here distinguishes from it. Fée thinks that there can be no identity between the common thorn here mentioned, and the Aspalathos. This latter, as mentioned in B. xii., according to Fée, is the Convolvulus scoparius of Linnæus, the broom bindweed, but Littré says that M. Fraas has identified it with the Genista acanthoclada.

[72] See the preceding Note. Fée identifies this Aspalathos with the Spartium villosum of Linnæus, making that of B xii. c. 52, to be the Lignum Rhodianum of commerce, probably the Convolvulus scoparius of Linnæus.

[73] The corresponding passage in Dioscorides has *βαρὺς*, "heavy," *i. e.* the most solid in the stem.

[74] In B. xii. c. 52.

[75] "Ozænas."

CHAP. 70.—THE THORN CALLED APPENDIX: TWO REMEDIES. THE PYRACANTHA: ONE REMEDY.

There is a thorn also known as the appendix;[76] that name being given to the red berries which hang from its branches. These berries eaten by themselves, raw, or else dried and boiled in wine, arrest looseness of the bowels and dispel griping pains in the stomach. The berries of the pyracantha[77] are taken in drink for wounds inflicted by serpents.

CHAP. 71.—THE PALIURUS: TEN REMEDIES.

The paliurus,[78] too, is a kind of thorn. The seed of it, known by the people of Africa as "zura," is extremely efficacious for the sting of the scorpion, as also for urinary calculi and cough. The leaves are of an astringent nature, and the root disperses inflamed tumours, gatherings, and abscesses; taken in drink it is diuretic in its effects. A decoction of it in wine arrests diarrhœa, and neutralizes the venom of serpents: the root more particularly is administered in wine.

CHAP. 72.—THE AGRIFOLIA. THE AQUIFOLIA: ONE REMEDY. THE YEW: ONE PROPERTY BELONGING TO IT.

The agrifolia,[79] pounded, with the addition of salt, is good for diseases of the joints, and the berries are used in cases of excessive menstruation, cœliac affections, dysentery, and cholera; taken in wine, they act astringently upon the bowels. A decoction of the root, applied externally, extracts foreign bodies from the flesh, and is remarkably useful for sprains and tumours.

The tree called "aquifolia," planted[80] in a town or country-

[76] The Berberis vulgaris of Linnæus, or barberry, Fée thinks.

[77] Identified by Fée with the Mespilus pyracantha of Linnæus, the evergreen thorn. It receives its name probably from the redness of its berries, which are the colour of fire.

[78] Fée considers this to be the Paliurus aculeatus of Decandolle, and not identical with the Paliurus mentioned in B. xiii. c. 33.

[79] Fée thinks that the copyists have made a mistake in this passage, and that the reading should be "aquifolia," the same plant that is mentioned afterwards under that name. He identifies them with the Ilex aquifolium, or holly. See B. xvi. cc. 8, 12, where Pliny evidently confounds the holm oak with the holly.

[80] Dioscorides says, B. i. c. 119, "the branches of the *rhamnus*, it is said, placed at the doors and windows, will avert the spells of sorcerers."

house, is a preservative against sorceries and spells. The blossom of it, according to Pythagoras, congeals[81] water, and a staff[82] made of the wood, if, when thrown at any animal, from want of strength in the party throwing it, it falls short of the mark, will roll back again[83] towards the thrower, of its own accord—so remarkable are the properties of this tree. The smoke of the yew kills[84] rats and mice.

### CHAP. 73.—THE BRAMBLE: FIFTY-ONE REMEDIES.

Nor yet has Nature destined the bramble[85] to be only an annoyance to mankind, for she has bestowed upon it mulberries of its own,[86] or, in other words, a nutritive aliment even for mankind. These berries are of a desiccative, astringent, nature,[87] and are extremely useful for maladies of the gums, tonsillary glands, and generative organs. They neutralize also the venom of those most deadly of serpents, the hæmorrhois[88] and the prester;[89] and the flowers or fruit will heal wounds inflicted by scorpions, without any danger of abscesses forming. The shoots of the bramble have a diuretic effect: and the more tender ones are pounded, and the juice extracted and then dried in the sun till it has attained the consistency of honey, being considered a most excellent remedy, taken in drink or applied externally, for maladies of the mouth and eyes, discharges of blood from the mouth, quinzy, affections of the

It is not improbable that Pliny, in copying from some other author, has mistaken the one for the other.

[81] An exaggeration, no doubt. The Cissampelos Pareira of Lamarck, an Indian plant, abounds in mucilage to such an extent, that an infusion of it in water becomes speedily coagulated.

[82] One would be induced to think that this story is derived from some vague account of the properties of the Boomerang. Although supposed by many to have been the invention of the natives of Australasia, representations of it are found on the sculptures of Nineveh. It is not improbable that Pythagoras may have heard of it from the Magi during his travels in the East. See *Bonomi's Nineveh*, p. 136.

[83] "Recubitu" seems preferable to "cubitu."

[84] This is very doubtful, Fée says.

[85] See B. xvi. c. 71.

[86] See B. xvi. c. 71.

[87] Blackberries are still used in the country, Fée says, as an astringent medicine, and all here stated that is based upon that property is rational enough. The same cannot, however, be said of the greater part of the other statements in this Chapter.

[88] See B. xx. cc. 23, 81, and B. xxiii. cc. 12, 18.

[89] See B. xx. c. 81, B. xxii. c. 13, and B. xxiii. c. 23.

uterus, diseases of the rectum, and cœliac affections. The leaves, chewed, are good for diseases of the mouth, and a topical application is made of them for running ulcers and other maladies of the head. In the cardiac disease they are similarly applied to the left breast by themselves. They are applied topically also for pains in the stomach and for procidence of the eyes. The juice of them is used as an injection for the ears, and, in combination with cerate of roses, it heals condylomata.

A decoction of the young shoots in wine is an instantaneous remedy for diseases of the uvula; and eaten by themselves like cymæ,[90] or boiled in astringent wine, they strengthen loose teeth. They arrest fluxes of the bowels also, and discharges of blood, and are very useful for dysentery. Dried in the shade and then burnt, the ashes of them are curative of procidence of the uvula. The leaves too, dried and pounded, are very useful, it is said, for ulcers upon beasts of burden. The berries produced by this plant would seem to furnish a stomatice[91] superior even to that prepared from the cultivated mulberry. Under this form, or else only with hypocisthis[91*] and honey, the berries are administered for cholera, the cardiac disease, and wounds inflicted by spiders.[92]

Among the medicaments known as "styptics,"[92*] there is none that is more efficacious than a decoction of the root of the bramble in wine, boiled down to one third. Ulcerations of the mouth and rectum are bathed with it, and fomentations of it are used for a similar purpose; indeed, it is so remarkably powerful in its effects, that the very sponges which are used become as hard as a stone.[93]

### CHAP. 74.—THE CYNOSBATOS: THREE REMEDIES.

There is another kind of bramble also,[94] which bears a rose. It produces a round excrescence,[95] similar to a chesnut in

[90] Cabbage-sprouts. See B. xix. c. 41.

[91] Or "mouth-medicine." See B. xxiii. c. 71.

[91*] See B. xxvi. cc. 31, 49, 87, and 90.

[92] The spider called "phalangium" is meant, Fée says. See B. xi. c. 28.

[92*] Astringents.

[93] "Lapidescunt."

[94] The eglantine. See B. xvi. c. 71.

[95] He alludes to "bedeguar," a fungous excrescence found on the wild rose-tree, and produced by the insect known as the Cynips rosæ. It is somewhat rough on the exterior, like the outer coat of the chesnut.

appearance, which is remarkably valuable as a remedy for calculus. This is quite a different production from the "cynorrhoda," which we shall have occasion to speak of in the succeeding Book.[96]

(14.) The cynosbatos[97] is by some called "cynapanxis,"[98] and by others "neurospastos;"[99] the leaf resembles the human footstep in shape. It bears also a black grape, in the berries of which there is a nerve, to which it is indebted for its name of "neurospastos." It is quite a different plant from the capparis[1] or caper, to which medical men have also given the name of "cynosbatos." The clusters[2] of it, pickled in vinegar, are eaten as a remedy for diseases of the spleen, and flatulency: and the string found in the berries, chewed with Chian mastich, cleanses the mouth.

The rose[3] of the bramble, mixed with axle-grease, is curative of alopecy: and the bramble-berries themselves, combined with oil of omphacium,[4] stain[5] the hair. The blossom of the bramble is gathered at harvest, and the white blossom, taken in wine, is an excellent remedy for pleurisy and cœliac affections. The root, boiled down to one third, arrests looseness of the bowels and hæmorrhage, and a decoction of it, used as a gargle, is good for the teeth: the juice too is employed as a fomentation for ulcers of the rectum and generative organs. The ashes of the root are curative of relaxations of the uvula.

[96] The fruit, Fée says, of the wild eglantine. See B. xxv. c. 6.

[97] Or "dog-bramble."

[98] "Dog-strangle," apparently.

[99] "Drawn with a string." Fée thinks that Pliny has confused the account given of this plant with that of the Aglaophotis, mentioned in c. 102 of this Book, and that the Cynosbatos is only a variety of the Rubus or bramble. Other authorities identify it with the Rubus caninus, or with the Rosa sempervirens. Desfontaines thinks that it is the Ribes nigrum, or black currant; and Littré is of opinion that some gooseberry or currant tree is meant.

[1] See B. xiii. c. 44.

[2] "Thyrsus." Fée thinks that the allusion is to the produce of the caper, while Hardouin says that it is the first cynosbatos that he is speaking of. Hardouin is probably right.

[3] The blossom, perhaps, of the Rubus fruticosus, or blackberry.

[4] See B. xii. c. 60.

[5] Fée says that they have no such property, and that the blossoms of the bramble are entirely destitute of any known medicinal qualities. The roots and leaves are somewhat astringent.

CHAP. 75.—THE IDÆAN BRAMBLE.

The Idæan bramble[6] is so called from the fact that it is the only plant of the kind found growing upon Mount Ida. It is of a more delicate nature than the others, and smaller; the canes too are thinner, and not[7] so prickly: it mostly grows beneath the shade of trees. The blossom of it, mixed with honey, is applied topically for defluxions of the eyes, and is administered in water for erysipelas and affections of the stomach.[8] In other respects, it has properties similar to those of the plants[9] already mentioned.

CHAP. 76.—THE RHAMNOS; TWO VARIETIES OF IT: FIVE REMEDIES.

Among the several kinds[10] of bramble is reckoned the plant called "rhamnos" by the Greeks. One variety of it is whiter[11] than the other, and has a more shrublike appearance, throwing out branches armed with straight thorns, and not hooked, like those of the other kinds; the leaves too are larger. The other kind,[12] which is found growing wild, is of a more swarthy hue, in some measure inclining to red; it bears too a sort[13] of pod. With the root of it boiled in water a medicament is made, known as "lycium:"[14] the seed of it is useful for bringing away the after-birth. The white kind, however, is of a more astringent and cooling nature, and better adapted for the treatment of gatherings and wounds. The leaves of both kinds, either raw or boiled, are employed topically with oil.

[6] The raspberry; see B. xvi. c. 71.

[7] There is one variety which is very diminutive, and entirely destitute of thorns, the Rubus Idæus lævis of C. Bauhin, the Rubus Idæus non spinosus of J. Bauhin.

[8] See B. xvi. c. 71.

[9] Of the bramble genus.

[10] In reality, as Fée says, there is no botanical affinity between the Rubus, or bramble, and the Rhamnus.

[11] Sprengel identifies this plant with the Zizyphus vulgaris of Linnæus, the jujube, and Desfontaines is of the same opinion. Fée, however, takes it to be the Rhamnus saxatilis of Linnæus, the rock buckthorn.

[12] Identified by some authorities with the Paliurus aculeatus of Decandolles, mentioned in c. 71. Sprengel is in doubt whether it may not be the Rhamnus lycioides of Linnæus.

[13] Not a characteristic, Fée says, of the genus Rhamnus of modern Botany.

[14] Or "Lycian" extract. See B. xii. c. 15.

CHAP. 77.—LYCIUM: EIGHTEEN REMEDIES.

The best lycium,[15] they say, is that prepared from the thorn of that name, known also as the "Chironian pyxacanthus,"[16] and mentioned by us when speaking of the trees of India, the lycium of those regions being generally looked upon as by far the best. The branches and roots, which are intensely bitter,[17] are first pounded and then boiled for three days in a copper vessel, after which the woody parts are removed, and the decoction is boiled again, till it has attained the consistency of honey. It is adulterated with various bitter extracts,[18] as also with amurca of olive oil and ox-gall. The froth or flower[19] of this decoction is used as an ingredient in compositions for the eyes: and the other part of it is employed as a cosmetic for the face, and for the cure of itch-scabs, corroding sores in the corners of the eyes, inveterate fluxes, and suppurations of the ears. It is useful too for diseases of the tonsillary glands and gums, for coughs, and for discharges of blood from the mouth, being generally taken in pieces the size of a bean. For the cure of discharges from wounds, it is applied to the part affected; and it is similarly used for chaps, ulcerations of the genitals, excoriations, ulcers, whether putrid, serpiginous, or of recent date, hard excrescences[20] of the nostrils, and suppurations. It is taken also by females, in milk, for the purpose of arresting the catamenia when in excess.

The Indian lycium is distinguished from the other kinds by its colour, the lumps being black outside, and, when broken, red within, though they turn black very quickly.[21] It is bitter and remarkably astringent, and is employed for all the purposes above mentioned, diseases of the generative organs in particular.

[15] See B. xii. c. 15. Fée identifies this with the modern Catechu, a decoction from the Acacia catechu, a leguminous plant of the East Indies.

[16] The Rhamnus lycioides of Linnæus, our buckthorn. The Indian plant from which catechu is extracted is of a similar nature. See B. xii. c. 15.

[17] This Fée looks upon as an exaggeration.

[18] See B. xii. c. 15.

[19] *I. e.* the choice part of it; see B. xii. c. 15. Catechu is adulterated at the present day with starch and argillaceous earths. As a medicament it is not possessed of a very powerful action.

[20] "Clavos."

[21] This statement is quite correct.

CHAP. 78.—SARCOCOLLA: TWO REMEDIES.

Some authors are of opinion that sarcocolla[22] is a tearlike gum which exudes from a kind of thorn;[23] it is similar to powdered incense in appearance, has a sweet flavour with a slight degree of bitter, and is of the consistency of gum. Pounded in wine, it arrests defluxions, and is used as a topical application for infants more particularly. This substance too becomes black[24] when old; the whiter it is, the more highly it is esteemed.

CHAP. 79.—OPORICE: TWO REMEDIES.

We are indebted too to the medicinal properties of trees for one very celebrated medicament, known as "oporice."[25] This preparation is used for dysentery and various affections of the stomach; the following being the method of preparing it. Five quinces, seeds and all, with the same number of pomegranates, one sextarius of sorbs, a similar quantity of Syrian rhus,[26] and half an ounce of saffron, are boiled in one congius of white grape-juice at a slow heat, till the whole mixture is reduced to the consistency of honey.

CHAP. 80.—THE TRIXAGO, CHAMÆDRYS, CHAMÆDROPS, OR TEUCRIA: SIXTEEN REMEDIES.

We shall now add to these plants, certain vegetable productions to which the Greeks have given names belonging to trees, so that it would be doubtful whether they themselves are not trees as well.

(15.) The chamædrys[27] is the same plant that in Latin is called "trixago;" some persons, however, call it "chamædrops," and others "teucria." The leaves of it are the size

[22] See B. xiii. c. 20.

[23] The Penæa sarcocolla is not a thorny tree.

[24] Fée says that this is not the case. It is no longer used in medicine.

[25] Or conserve of fruits. An electuary.

[26] Seed of the sumach. See B. xiii. c. 13.

[27] "Ground oak." See B. xiv. c. 19; where it is identified with the Teucrium chamædrys of Linnæus. Littré, however, informs us, that M. Fraas considers it to be the Teucrium lucidum of Linnæus; because, as we learn from Dioscorides, it grows on rocky places, is a remarkably diminutive shrub, and has a fine odour, all of which are characteristics of the latter plant, and not of the Teucrium chamædrys, commonly known as the dwarf oak or germander.

of those of mint, but in their colour and indentations they resemble those of the oak. According to some, the leaves are serrated, and it was these, they say, that first suggested the idea of the saw:[28] the flower of it borders closely upon purple. This plant is gathered in rough craggy localities, when it is replete with juice; and, whether taken[29] internally or applied topically, it is extremely efficacious for the stings of venomous serpents, diseases of the stomach, inveterate coughs, collections of phlegm in the throat, ruptures, convulsions, and pains in the sides. It diminishes the volume of the spleen, and acts as a diuretic and emmenagogue; for which reasons it is very useful in incipient dropsy, the usual dose being a handful of the sprigs boiled down to one third in three heminæ of water. Lozenges too are made of it for the above-named purposes, by bruising it in water. In combination with honey, it heals abscesses and inveterate or sordid ulcers: a wine[30] too is prepared from it for diseases of the chest. The juice of the leaves, mixed with oil, disperses films on the eyes; it is taken also, in vinegar, for diseases of the spleen; employed as a friction, it is of a warming nature.

### CHAP. 81.—THE CHAMÆDAPHNE: FIVE REMEDIES.

The chamædaphne[31] consists of a single diminutive stem, about a cubit in height, the limbs of it being smaller than those of the laurel. These leaves * * * The seed, which is of a red colour, and attached to the leaves, is applied fresh for head-ache, is of a cooling nature for burning heats, and is taken for griping pains in the bowels, with wine. The juice of this plant, taken in wine, acts as an emmenagogue and diuretic; and applied as a pessary in wool, it facilitates laborious deliveries.

### CHAP. 82.—THE CHAMELÆA: SIX REMEDIES.

The leaves of the chamelæa[32] resemble those of the olive; they are bitter, however, and odoriferous. This plant is found

[28] An invention attributed to Dædalus, in B. vii. c. 57.

[29] The Teucrium chamædrys is a bitter plant, which has been successfully used for fever, and it acts as a tonic and vermifuge. Beyond these, it has no medicinal properties whatever.

[30] See B. xiv. c. 19.

[31] Or "ground-laurel." Fée considers this to be identical with the Alexandrian laurel, mentioned in B. xv. c. 39. It is no longer used in medicine, but the roots of a plant of kindred nature, the Ruscus aculeatus, or butcher's broom, are diuretic.

[32] Or "ground olive." See B. xiii. c. 35.

growing in craggy localities, and never exceeds a palm in height. It is of a purgative[33] nature, and carries off phlegm and bile; for which purposes, the leaves are boiled with twice the quantity of wormwood, and the decoction taken with honey. The leaves, applied to ulcers, have a detergent effect. It is said, that if a person gathers it before sunrise, taking care to mention that he is gathering it for the cure of white specks[34] in the eyes, and then wears it as an amulet, it will effect a cure: as also that, gathered in any way, it is beneficial for the eyes of beasts of burden and cattle.

### CHAP. 83.—THE CHAMÆSYCE: EIGHT REMEDIES.

The chamæsyce[35] has leaves similar to those of the lentil, and lying close to the ground; it is found growing in dry, rocky, localities. A decoction of it in wine is remarkably useful as a liniment for improving[36] the sight, and for dispersing cataract, cicatrizations, films, and cloudiness of the eyes. Applied in a pledget of linen, as a pessary, it allays pains in the uterus; and used topically[37] it removes warts and excrescences of all kinds. It is very useful also for hardness of breathing.

### CHAP. 84.—THE CHAMÆCISSOS: ONE REMEDY.

The chamæcissos[38] has ears like[39] those of wheat, with numerous leaves, and small branches, about five in number. When in blossom it might almost be taken for the white violet: the root of it is diminutive. For sciatica, the leaves of it are taken, seven days consecutively, in doses of three oboli, in two cyathi of wine: this is a very bitter potion, however.

### CHAP. 85.—THE CHAMÆLEUCE, FARFARUM, OR FARFUGIUM: ONE REMEDY.

The chamæleuce[40] is known among us as the "farfarum" or "farfugium:" it grows on the banks of rivers, and has a leaf

[33] This, Fée says, is consistent with modern experience; indeed it is drastic to a dangerous extent.

[34] "Albugines."

[35] Or "ground fig." The Euphorbia chamæsyce, or annual spurge.

[36] The juices are irritating and acrid, and would in reality be highly dangerous to the eyes.

[37] Owing to its caustic powers, it really is good for the removal of warts.

[38] Or "ground-ivy." See B. xvi. c. 62, and c. 49 of this Book.

[39] Fée says that this comparison is not strictly correct.

[40] The "ground-poplar." See B. xxvi. c. 19. Identified with the Tussilago farfara of Linnæus; our colt's-foot.

like that of the poplar, only larger. The root of it is burnt upon cypress charcoal, and, by the aid of a funnel,[41] the smoke inhaled, in cases of inveterate cough.

CHAP. 86.—THE CHAMÆPEUCE: FIVE REMEDIES. THE CHAMÆCYPARISSOS: TWO REMEDIES. THE AMPELOPRASON; SIX REMEDIES. THE STACHYS: ONE REMEDY.

The chamæpeuce[42] has a leaf which resembles that of the larch, and is useful more particularly for lumbago and pains in the back. The chamæcyparissos[43] is a herb which, taken in wine, counteracts the venom of serpents of all kinds, and of scorpions.

The ampeloprason[44] is found growing in vineyards; it has leaves like those of the leek, and produces offensive eructations. It is highly efficacious for the stings of serpents, and acts as an emmenagogue and diuretic. Taken in drink or applied externally, it arrests discharges of blood from the generative organs. It is prescribed also for females after delivery, and is used for bites inflicted by dogs.

The plant known as "stachys" bears a strong resemblance also to a leek,[45] but the leaves of it are longer and more numerous. It has an agreeable smell, and in colour inclines to yellow. It promotes menstruation.

CHAP. 87.—THE CLINOPODION, CLEONICION, ZOPYRON, OR OCIMOÏDES: THREE REMEDIES.

The clinopodion,[46] cleonicion, zopyron, or ocimoïdes, resem-

[41] Or "tube"—"infundibulum." Colt's-foot is still smoked, either by itself or in conjunction with tobacco. Fée says, however, that to inhale the smoke in the manner here described, would be enough to create a cough if it did not exist before.

[42] "Ground-pine" or "ground pitch-tree." Identified by Sprengel with the Stœhelina chamæpeuce of Willdenow, a corymbiferous plant of the Isle of Candia.

[43] "Ground-cypress." Identified with the Euphorbia cyparissias of Linnæus, the cypress spurge. Taken internally, it is a corrosive poison.

[44] Or "vine-leek." The Allium ampeloprason of Linnæus, the great round-headed garlic. It is no longer used in medicine, and all that Pliny states as to its medicinal properties is quite unfounded, Fée says.

[45] Fée thinks that Pliny has committed an error here, and that the word "marrubii" should be substituted, our "horehound." He identifies it with the Stachys Germanica of Linnæus, or base horehound; which is more commonly found in the South of Europe than in Germany.

[46] Or "bed-foot." The Clinopodium vulgare of Linnæus, our wild

bles wild thyme in appearance. The stem of it is tough and ligneous, and it is a palm in height. It grows in stony soils, and the leaves are trained regularly around the stem,[47] which resembles a bed-post in appearance. This plant is taken in drink, for convulsions, ruptures, strangury, and wounds inflicted by serpents: a decoction is also made of it, and the juice is similarly employed.

CHAP. 88.—THE CLEMATIS CENTUNCULUS; THREE REMEDIES.

We shall now have to annex some plants, of a marvellous nature no doubt, but not so well known, reserving those of a higher reputation for the succeeding Books.

Our people give the name of "centunculus,"[48] to a creeping plant that grows in the fields, the leaves of which bear a strong resemblance to the hoods attached to our cloaks. By the Greeks it is known as the "clematis." Taken in astringent wine it is wonderfully effectual for arresting[49] diarrhœa: beaten up, in doses of one denarius, in five cyathi of oxymel or of warm water, it arrests hæmorrhage, and facilitates the after-birth.

CHAP. 89.—THE CLEMATIS ECHITES, OR LAGINE.

The Greeks have other varieties also of the clematis, one of which is known as "echites"[50] or "lagine," and by some as the "little scammony." Its stems are about two feet in height, and covered with leaves: in general appearance it is not unlike scammony, were it not that the leaves are darker and more diminutive; it is found growing in vineyards and cultivated soils. It is eaten as a vegetable, with oil and salt, and acts as a laxative upon the bowels. It is taken[51] also for dysentery,

basil. It has some useful properties attributed to it; but what Pliny here states respecting it is erroneous.

[47] This seems to be the meaning of "orbiculato foliorum ambitu."

[48] Turner and C. Bauhin identify it with the Gnaphalium Germanicum of Lamarck, and Sprengel with the Polygonum convolvulus of Linnæus. If so, Fée says, the synonym here given by Pliny is erroneous; for the Greek clematis, there can be little doubt, is the Clematis cirrhosa of Linnæus. See the account given of the Gnaphalion in B. xxvii. c. 61.

[49] All that Pliny states as to its medicinal properties, Fée says, is erroneous.

[50] Probably the Asclepias nigra of Linnæus, black swallow-wort.

[51] The Asclepias nigra has no such medicinal effects as those mentioned by Pliny.

with linseed, in astringent wine. The leaves of this plant are applied with polenta for defluxions of the eyes, the part affected being first covered with a pledget of wet linen. Applied to scrofulous sores, they cause them to suppurate, and if some axle-grease is then applied, a perfect cure will be effected. They are applied also to piles, with green oil, and are good for phthisis, in combination with honey. Taken with the food, they increase the milk in nursing women, and, rubbed upon the heads of infants, they promote the rapid growth of the hair. Eaten with vinegar, they act as an aphrodisiac.

CHAP. 90.—THE EGYPTIAN CLEMATIS, DAPHNOÏDES, OR POLYGONOÏDES: TWO REMEDIES.

There is another kind also, known as the "Egyptian"[52] clematis, otherwise as "daphnoïdes"[53] or "polygonoïdes:" it has a leaf like that of the laurel, and is long and slender. Taken in vinegar, it is very useful for the stings of serpents, that of the asp in particular.

CHAP. 91. (16.)—DIFFERENT OPINIONS ON THE DRACONTIUM.

It is Egypt more particularly that produces the clematis known as the "aron," of which we have already[54] made some mention when speaking of the bulbs. Respecting this plant and the dracontium, there have been considerable differences of opinion. Some writers, indeed, have maintained that they are identical, and Glaucias has made the only distinction between them in reference to the place of their growth, assuming that the dracontium is nothing else than the aron in a wild state. Some persons, again, have called the root "aron," and the stem of the plant "dracontium:" but if the dracontium is the same as the one known to us as the "dracunculus,"[55] it is a different plant altogether; for while the aron has a broad, black, rounded root, and considerably larger,—large enough, indeed, to fill the hand,—the dracunculus has a

[52] The Vinca major and Vinca minor of Linnæus, the greater and smaller periwinkle. Fée is at a loss to know why it should be called "Egyptian," as it is a plant of Europe.

[53] "Laurel-shaped" and "many-cornered."

[54] In B. xix. c. 30.

[55] Fée says that the Dracontion of the Greeks and the Dracunculus of the Latins are identical, being represented in modern Botany by the Arum dracunculus of Linnæus, the common dragon.

reddish root of a serpentine form, to which, in fact, it owes its name.[56]

CHAP. 92.—THE ARON: THIRTEEN REMEDIES.

The Greeks themselves, in fact, have established an immense difference between these two plants, in attributing to the seed of the dracunculus certain hot, pungent properties, and a fetid odour[57] so remarkably powerful as to be productive of abortion,[58] while upon the aron, on the other hand, they have bestowed marvellous encomiums. As an article of food, however, they give the preference to the female plant, the male plant being of a harder nature, and more difficult to cook. It carries off,[59] they say, all vicious humours from the chest, and powdered and taken in the form either of a potion or of an electuary, it acts as a diuretic and emmenagogue. Powdered and taken in oxymel, it is good for the stomach; and we find it stated that it is administered in ewe's milk for ulcerations of the intestines, and is sometimes cooked on hot ashes and given in oil for a cough. Some persons, again, are in the habit of boiling it in milk and administering the decoction; and it has been used also in a boiled state as a topical application for defluxions of the eyes, contusions, and affections of the tonsillary glands. * * * *[60] prescribes it with oil, as an injection for piles, and recommends it as a liniment, with honey, for freckles.

Cleophantus has greatly extolled this plant as an antidote for poisons, and for the treatment of pleurisy and peripneumony, prepared the same way as for coughs. The seed too, pounded with olive oil or oil of roses, is used as an injection for pains

[56] From "draco," a "dragon" or "serpent." Fée says, that it is not to its roots, but to its spotted stem, resembling the skin of an adder, that it owes its name.

[57] "Virus." Fée says that the Arum dracunculus has a strong, fetid odour, and all parts of it are acrid and caustic, while the Arum colocasia has an agreeable flavour when boiled.

[58] This, Fée says, is fabulous.

[59] Though no longer used in medicine, the account here given of the properties of the Arum colocasia is in general correct, a few marvellous details excepted.

[60] Sillig thinks that there is a lacuna here, and that the name "Cleophantus" should be supplied.

in the ears. Dieuches prescribes it, mixed in bread[61] with meal, for the cure of coughs, asthma, hardness of breathing, and purulent expectorations. Diodotus recommends it, in combination with honey, as an electuary for phthisis and diseases of the lungs, and as a topical application even for fractured bones. Applied to the sexual parts, it facilitates delivery in all kinds of animals; and the juice extracted from the root, in combination with Attic honey, disperses films upon the eyes, and diseases of the stomach. A decoction of it with honey is curative of cough; and the juice is a marvellous remedy for ulcers of every description, whether phagedænic, carcinomatous, or serpiginous, and for polypus of the nostrils. The leaves, boiled in wine and oil, are good for burns, and, taken with salt and vinegar, are strongly purgative; boiled with honey, they are useful also for sprains, and used either fresh or dried, with salt, for gout in the joints.

Hippocrates has prescribed the leaves, either fresh or dried, with honey, as a topical application for abscesses. Two drachmæ of the seed or root, in two cyathi of wine, are a sufficient dose to act as an emmenagogue, and a similar quantity will have the effect of bringing away the after-birth, in cases where it is retarded.[62] Hippocrates used to apply the root also, for the purpose. They say too, that in times of pestilence the employment of aron as an article of food is very beneficial. It dispels the fumes of wine; and the smoke of it burnt drives away serpents,[63] the asp in particular, or else stupefies them to such a degree as to reduce them to a state of torpor. These reptiles also will fly at the approach of persons whose bodies have been rubbed with a preparation of aron with oil of laurel: hence it is generally thought a good plan to administer it in red wine to persons who have been stung by serpents. Cheese, it is said, keeps remarkably well, wrapped in leaves of this plant.

[61] Fée thinks that, thus employed, it would be more injurious than beneficial. Though Pliny is treating here of the Arum colocasia or Egyptian Arum, he has mingled some few details with it, relative to the Arum dracunculus, a plant endowed with much more energetic properties. See Note 57 above.

[62] See B. viii. c. 54, as to the use alleged to be made by animals of this plant.

[63] Fée says that this is very doubtful.

CHAP. 93.—THE DRACUNCULUS; TWO REMEDIES.

The plant which I have spoken of[65] as the dracunculus, is taken out of the ground just when the barley is ripening, and at the moon's increase. It is quite sufficient to have this plant about one, to be safe from all serpents; and it is said, that an infusion of the larger kind taken in drink, is very useful for persons who have been stung by those reptiles: it is stated also that it arrests the catamenia when in excess, due care being taken not to let iron touch it. The juice of it too is very useful for pains in the ears.

As to the plant known to the Greeks by the name of "dracontion," I have[66] had it pointed out to me under three different forms; the first[67] having the leaves of the beet, with a certain proportion of stem, and a purple flower, and bearing a strong resemblance to the aron. Other persons, again, have described it as a plant[69] with a long root, embossed to all appearance and full of knots, and consisting of three stems in all; the same parties have recommended a decoction of the leaves in vinegar, as curative of stings inflicted by serpents. The third[70] plant that has been pointed out to me has a leaf larger than that of the cornel, and a root resembling that of the reed. This root, I have been assured, has as many knots on it as the plant is years old, the leaves, too, being as many in number. The plant is recommended also for the stings of serpents, administered either in wine or in water.

CHAP. 94.—THE ARISAROS: THREE REMEDIES.

There is a plant also called the "arisaros,"[71] which grows in Egypt, and is similar to the aron in appearance, only that it is more diminutive, and has smaller leaves; the root too is smaller, though fully as large as a good-sized olive. The white arisaros throws out two stems, the other kind only one. They are curative, both of them, of running ulcers and burns, and are used as an injection for fistulas. The leaves, boiled in

[65] In c. 91 of this Book. This story is owing merely to its appearance, which somewhat resembles the skin of a serpent.

[66] "Demonstratum mihi est."

[67] Identified by Fée with the Arum Italicum of Lamarck.

[69] Fée queries whether this may not be the Arum maculatum of Linnæus, wake-robin, cuckoo pint, or lords and ladies.

[70] Identified by C. Bauhin with the Calla palustris of Linnæus.

[71] The Arum arisarum of Linnæus, hooded arum or friar's cowl, a native of the coasts of Barbary and the South of Europe.

water, and then beaten up with the addition of oil of roses, arrest the growth of corrosive ulcers. But there is one very marvellous fact connected with this plant—it is quite sufficient to touch the sexual parts of any female animal with it to cause its instantaneous death.

### CHAP. 95.—THE MILLEFOLIUM OR MYRIOPHYLLON; SEVEN REMEDIES.

The myriophyllon,[72] by our people known as the "millefolium" has a tender stem, somewhat similar to fennel-giant in appearance, with vast numbers of leaves, to which circumstance it is indebted for its name. It grows in marshy localities, and is remarkably useful for the treatment of wounds. It is taken in vinegar for strangury, affections of the bladder, asthma, and falls with violence; it is extremely efficacious also for tooth-ache.

In Etruria, the same name is given to a small meadow-plant,[73] provided with leaves at the sides, like hairs, and particularly useful for wounds. The people of that country say that, applied with axle-grease, it will knit together and unite the tendons of oxen, when they have been accidentally severed by the plough-share.[74]

### CHAP. 96.—THE PSEUDOBUNION: FOUR REMEDIES.

The pseudobunion[75] has the leaves of the turnip, and grows in a shrub-like form, about a palm in height; the most esteemed being that of Crete. For gripings of the bowels, strangury, and pains of the thoracic organs, some five or six sprigs of it are administered in drink.

### CHAP. 97.—THE MYRRHIS, MYRIZA, OR MYRRHA: SEVEN REMEDIES.

The myrrhis,[76] otherwise known as the myriza or myrrha,

[72] Or "ten thousand leaves." The Myriophyllum spicatum of Linnæus, according to most authorities, though Fée considers it very doubtful.

[73] Possibly the Achillea millefolium of Linnæus, our milfoil or yarrow. It is still said to have the property of healing wounds made by edge-tools, for which reason it is known in France as the "carpenter's plant."

[74] This assertion, as Fée remarks, is more than doubtful.

[75] "Bastard turnip." Desfontaines identifies it with the Bunium aromaticum; Fée queries whether it may not be the Pimpinella tenuis of Sieber, found in Crete. The Berberis vulgaris has been also suggested.

[76] Desfontaines identifies it with the Scandix odorata of Linnæus. Har-

bears a strong resemblance to hemlock in the stem, leaves, and blossom, only that it is smaller and more slender: it is by no means unpleasant to the palate. Taken with wine, it acts as an emmenagogue, and facilitates parturition: they say too that in times of pestilence it is very wholesome, taken in drink. It is very useful also for phthisis, administered in broth. It sharpens the appetite, and neutralizes the venom of the phalangium. The juice of this plant, after it has been macerated some three days in water, is curative of ulcers of the face and head.

### CHAP. 98.—THE ONOBRYCHIS: THREE REMEDIES.

The onobrychis[77] has leaves like those of the lentil, only somewhat[78] longer; the blossom is red, and the root small and slender. It is found growing in the vicinity of springs. Dried and reduced to powder, and sprinkled in white wine, it is curative of strangury, and arrests looseness of the bowels. The juice of it, used as a friction with oil, acts as a sudorific.

### CHAP. 99. (17.)—CORACESTA AND CALLICIA.

While I am treating of plants of a marvellous nature, I am induced to make some mention of certain magical plants—for what, in fact, can there be more marvellous than they? The first who descanted upon this subject in our part of the world were Pythagoras and Democritus, who have adopted the accounts given by the Magi. Coracesta[79] and callicia, according to Pythagoras, are plants which congeal[80] water. I find no mention made of them, however, by any other author, and he himself gives no further particulars relative to them.

douin says that it is musk chervil, the Chærophyllum aromaticum of Linnæus, in which he has followed Dodonæus. Fuchsius suggests the Chærophyllum silvestre of Linnæus: Fée expresses himself at a loss to decide.

[77] Probably the Hedysarum onobrychis of Linnæus, our sainfoin.

[78] They are *very much* larger than those of the lentil, in fact. This diversity has caused Fée to express some doubts whether it really is identical with sainfoin. The Polygala officinalis has also been suggested.

[79] Dalechamps considers these appellations to mean the "virgins' plant," and the "plant of beauty."

[80] The Cissampelos Pareira, as already stated, abounds in mucilage to such a degree, as to impart a consistency to water, without impairing its transparency. See c. 72 of this Book.

### CHAP. 100.—THE MINSAS OR CORINTHIA: ONE REMEDY.

Pythagoras gives the name of minsas[81] too, or corinthia, to another plant; a decoction of which, used as a fomentation, will effect an instantaneous cure of stings inflicted by serpents, according to him. He adds too, that if this decoction is poured upon the grass, and a person happens to tread upon it, or if the body should chance to be sprinkled with it, the result is fatal beyond all remedy; so monstrously malignant are the venomous properties of this plant, except as neutralizing other kinds of poison.

### CHAP 101.—THE APROXIS: SIX REMEDIES.

Pythagoras makes mention, too, of a plant called aproxis, the root of which takes fire[82] at a distance, like naphtha, of which we have made some mention, when speaking[83] of the marvellous productions of the earth. He says too, that if the human body happens to be attacked by any disease while the cabbage[84] is in blossom, the person, although he may have been perfectly cured, will be sensible of a recurrence of the symptoms, every time that plant comes into blossom; a peculiarity which he attributes to it in common with wheat, hemlock, and the violet.

I am not ignorant, however, that the work of his from which I have just quoted is ascribed to the physician Cleemporus by some, though antiquity and the unbroken current of tradition concur in claiming it for Pythagoras. It is quite enough, however, to say in favour of a book, that the author has deemed the results of his labours worthy to be published under the name of so great a man. And yet who can believe that Cleemporus would do this, seeing that he has not hesitated to publish other works under his own name?

[81] The reading of this word is doubtful. Hardouin thinks that it is the same as the Minyanthes mentioned in B. xxi. c. 88.

[82] Fée says that the only cases known of a phænomenon resembling this, are those of the Dictamnus albus, white dittany, which attracts flame momentarily when in flower, and of the Tropæolum majus, or great Indian cress. He thinks, however, that there are some trees so rich in essential oil, that they might possibly ignite as readily as naphtha.

[83] In B. ii. c. 109.

[84] Another reading here is "aproxis," which seems more probable.

CHAP. 102.—THE AGLAOPHOTIS OR MARMARITIS. THE ACHÆMENIS OR HIPPOPHOBAS. THE THEOBROTION OR SEMNION. THE ADAMANTIS. THE ARIANIS. THE THERIONARCA. THE ÆTHIOPIS OR MEROIS. THE OPHIUSA. THE THALASSEGLE OR POTAMAUGIS. THE THEANGELIS. THE GELOTOPHYLLIS. THE HESTIATORIS OR PROTOMEDIA. THE CASIGNETES OR DIONYSONYMPHAS. THE HELIANTHES OR HELIOCALLIS. HERMESIAS. THE ÆSCHYNOMENE. THE CROCIS. THE ŒNOTHERIS. THE ANACAMPSEROS.

As to Democritus, there can be no doubt that the work called "Chirocmeta"[85] belongs to him. How very much more marvellous too are the accounts given in this book by the philosopher who, next to Pythagoras, has acquired the most intimate knowledge of the learning of the Magi! According to him, the plant aglaophotis,[86] which owes its name to the admiration in which its beauteous tints are held by man, is found growing among the marble quarries of Arabia, on the side of Persia, a circumstance which has given it the additional name of "marmaritis." By means of this plant, he says, the Magi can summon the deities into their presence when they please.

The achæmenis,[87] he says, a plant the colour of amber, and destitute of leaves, grows in the country of the Tradastili, an Indian race. The root of it, divided into lozenges and taken in wine in the day time, torments the guilty to such a degree during the night by the various forms of avenging deities presented to the imagination, as to extort from them a confession of their crimes. He gives it the name also of "hippophobas," it being an especial object of terror to mares.

The theobrotion[88] is a plant found at a distance of thirty schœni[89] from the river Choaspes; it represents the varied tints of the peacock, and the odour of it is remarkably fine. The

[85] "The work of his own hands," according to Hesychius.

[86] "Admiration of man." It is impossible to say what plant is meant under this name, but the pæony, Pæonia officinalis, has been suggested; also the Tropæolum majus. Desfontaines queries whether it may not be the Cæsalpinia pulcherrima, a native of the East. Some authors, Fée says, have identified it with the "Moly" of Homer.

[87] So called from Achæmenes, the ancestor of the Persian kings. Fée thinks that it was a variety of the Euphorbia antiquorum, or else a nightshade.

[88] "Food for the gods."

[89] See B. xii. c. 30; also the Introduction to Vol. III.

kings of Persia, he says, are in the habit of taking it in their food or drink, for all maladies of the body, and derangements of the mind. It has the additional name of semnion,[90] from the use thus made of it by majesty.

He next tells us of the adamantis,[91] a plant grown in Armenia and Cappadocia: presented to a lion, he says, the beast will fall upon its back, and drop its jaws. Its name originates in the fact that it is impossible to bruise it. The arianis,[92] he says, is found in the country of the Ariani; it is of a fiery colour, and is gathered when the sun is in Leo. Wood rubbed with oil will take fire on coming in contact with this plant. The therionarca,[93] he tells us, grows in Cappadocia and Mysia; it has the effect of striking wild beasts of all kinds with a torpor which can only be dispelled by sprinkling them with the urine of the hyæna. He speaks too of the æthiopis,[94] a plant which grows in Meroë; for which reason it is also known as the "meroïs." In leaf it resembles the lettuce, and, taken with honied wine, it is very good for dropsy. The ophiusa,[95] which is found in Elephantine, an island also of Æthiopia, is a plant of a livid colour, and hideous to the sight. Taken by a person in drink, he says, it inspires such a horror of serpents, which his imagination continually represents as menacing him, that he commits suicide at last; hence it is that persons guilty of sacrilege are compelled to drink an infusion of it. Palm wine, he tells us, is the only thing that neutralizes its effects.

The thalassægle[96] he speaks of as being found on the banks of the river Indus, from which circumstance it is also known as the potamaugis.[97] Taken in drink it produces a delirium,[98] which presents to the fancy visions of a most extraordinary nature. The theangelis,[99] he says, grows upon Mount Li-

[90] "Venerable" or "majestic." [91] "Hard as a diamond."

[92] The Spina Ariana is mentioned in B. xii. c. 18.

[93] See B. xx. c. 65, where a plant is mentioned by this name.

[94] Dalechamps thinks that an Euphorbia is meant under this name.

[95] "Serpent-plant." Fée thinks that a hemlock may possibly be meant, or perhaps the Arum serpentaria; see c. 93 of this Book.

[96] "Brightness of the sea." A narcotic plant, Fée thinks, probably a night-shade.

[97] Hardouin suggests "potamitis," river-plant.

[98] It is not impossible that this may in reality be an allusion to the effects of opium, or of hasheesh.

[99] "Messenger of the gods," apparently.

banus in Syria, upon the chain of mountains called Dicte in Crete, and at Babylon and Susa in Persis. An infusion of it in drink, imparts powers of divination to the Magi. The gelotophyllis[1] too, is a plant found in Bactriana, and on the banks of the Borysthenes. Taken internally with myrrh and wine, all sorts of visionary forms present themselves, and excite the most immoderate laughter, which can only be put an end to by taking kernels of the pine-nut, with pepper and honey, in palm wine.

The hestiatoris,[2] he tells us, is a Persian plant, so called from its promotion of gaiety and good fellowship at carousals. Another name for it is protomedia, because those who eat of it will gain the highest place in the royal favour. The casignetes[3] too, we learn, is so called, because it grows only among plants of its own kind, and is never found in company with any other; another name given to it is "dionysonymphas,"[4] from the circumstance of its being remarkably well adapted to the nature of wine. Helianthes[5] is the name he gives to a plant found in the regions of Themiscyra and the mountainous parts of maritime Cilicia, with leaves like those of myrtle. This plant is boiled up with lion's fat, saffron and palm wine being added; the Magi, he tells us, and Persian monarchs are in the habit of anointing the body with the preparation, to add to its graceful appearance: he states also, that for this reason it has the additional name of "heliocallis."[6] What the same author calls "hermesias,"[7] has the singular virtue of ensuring the procreation of issue, both beautiful as well as good. It is not a plant, however, but a composition made of kernels of pine nuts, pounded with honey, myrrh, saffron, and palm wine, to which theobrotium[8] and milk are then added. He also

[1] "Laughing leaves." Possibly, Fée thinks, the Ranunculus philonotis, the Herba Sardoa or Sardonic plant of Virgil, known by some authorities as the Apium risus, or "laughing parsley." Desfontaines suggests that hemp (prepared in the form of *hasheesh*) is meant.

[2] "Convivial" plant. Desfontaines identifies it with the Areca catechu, which is chewed in India for the benefit of the teeth and stomach, and as a sweetener of the breath.

[3] "Brother" plant.

[4] "Bride of Dionysus or Bacchus."

[5] "Sun-flower." Not the plant, however, known to us by that name.

[6] "Beauty of the sun," apparently.

[7] "Mixture of Hermes," apparently.

[8] Previously mentioned in this Chapter.

recommends those who wish to become parents to drink this mixture, and says, that females should take it immediately after conception, and during pregnancy.[9] If this is done, he says, the infant will be sure to be endowed with the highest qualities, both in mind and body. In addition to what has here been stated, Democritus gives the various names by which all these plants are known to the Magi.

Apollodorus, one of the followers of Democritus, has added to this list the herb æschynomene,[10] so called from the shrinking of its leaves at the approach of the hand; and another called "crocis,"[11] the touch of which is fatal to the phalangium. Crateuas, also, speaks of the œnotheris,[12] an infusion of which in wine, sprinkled upon them, has the effect of taming all kind of animals, however wild. A celebrated grammarian,[13] who lived but very recently, has described the anacampseros,[14] the very touch of which recalls former love, even though hatred should have succeeded in its place. It will be quite sufficient for the present to have said thus much in reference to the remarkable virtues attributed to certain plants by the Magi; as we shall have occasion to revert to this subject in a more appropriate place.[15]

### CHAP. 103. (18.)—THE ERIPHIA.

Many authors have made mention of the eriphia,[16] a plant which contains a kind of beetle in its hollow stem. This

[9] As Fée remarks, it has been a notion in comparatively recent times, that it is possible to procreate children of either sex at pleasure.

[10] The "bashful" plant. An Acacia, Fée thinks; see B. xiii. c. 19. The Mimosa casta, pudica, and sensitiva, have similar properties: the Sensitive Plant is well known in this country.

[11] Fée queries whether this may not be the Silene muscipula of Linnæus, the fly-trap.

[12] The "wine-tamer."

[13] Hardouin thinks that he alludes to the Grammarian Apion. Dalechamps thinks that it is either Apion or Apollodorus.

[14] The "returning" plant. Fée says that the Sedum Telephium of Linnæus, or orpine, is called in the dictionaries by this name. He queries whether it may not be the Sedum anacampseros, or evergreen orpine, as Hesychius says that it continues to live after being taken up from the earth; a peculiarity, to some extent, of the house-leek.

[15] He probably alludes to his remarks upon Magic, in Books xxix. and xxx.

[16] From ἔριφος, a "kid." Ruellius has attempted to identify this plant with one of the Ranunculaceæ; but there is little doubt, as Fée says, that both plant and insect are imaginary.

beetle is continually ascending the interior of the stalk, and as often descending, while it emits a sound like the cry of a kid; a circumstance to which the plant is indebted for its name. There is nothing in existence, they say, more beneficial to the voice.

CHAP. 104.—THE WOOL PLANT: ONE REMEDY. THE LACTORIS: ONE REMEDY. THE MILITARIS: ONE REMEDY.

The wool plant,[17] given to sheep fasting, greatly increases the milk. The plant commonly called lactoris,[18] is equally well known: it is full of a milky juice, the taste of which produces vomiting. Some persons say that this is identical with, while others say that it only resembles, the plant known as "militaris,"[19] from the fact that, applied with oil, it will effect the cure, within five days, of any wound that has been inflicted with iron.

CHAP. 105.—THE STRATIOTES: FIVE REMEDIES.

The Greeks speak in high terms also of the stratiotes,[20] though that is a plant which grows in Egypt only, and during the inundations of the river Nilus. It is similar in appearance to the aïzoön,[21] except that the leaves are larger. It is of a remarkably cooling nature, and, applied with vinegar, it heals wounds, as well as erysipelas and suppurations. Taken in drink with male frankincense, it is marvellously useful for discharges of blood from the kidneys.

CHAP. 106. (19.)—A PLANT GROWING ON THE HEAD OF A STATUE: ONE REMEDY.

It is asserted also, that a plant growing[22] on the head of a

[17] "Herba lanaria." See B. xix. c. 18.

[18] Hardouin identifies it with the Ulva lactuca of Linnæus; but that plant, Fée says, contains no milky juice, and does not act as an emetic. One of the Euphorbiaceæ is probably meant.

[19] "Military" plant. Hardouin identifies it with the Achillea millefolium of Linnæus, mentioned in c. 95 of this Book. Fée, however, does not recognize the identity.

[20] "Soldier" plant. Cæsalpinus identifies it with the Salvinia natans; but Fée thinks, with Sprengel, that it is the Pistia stratiotes of Linnæus, great duckweed or pondweed.

[21] "Always living." See B. xix. c. 58.

[22] It is pretty clear that in relating this absurdity he is not speaking of one plant solely, but of any plant which may chance to grow on the head

statue, gathered in the lappet of any one of the garments, and then attached with a red string to the neck, is an instantaneous cure for head-ache.

CHAP. 107.—A PLANT GROWING ON THE BANKS OF A RIVER: ONE REMEDY.

Any plant that is gathered before sunrise on the banks of a stream or river, due care being taken that no one sees it gathered, attached to the left arm without the patient knowing what it is, will cure a tertian fever, they say.

CHAP. 108.—THE HERB CALLED LINGUA: ONE REMEDY.

There is a herb called "lingua,"[23] which grows in the vicinity of fountains. The root of it, reduced to ashes and beaten up with hog's lard—the hog, they say, must have been black and barren—will cure alopecy, the head being rubbed with it in the sun.

CHAP. 109.—PLANTS THAT TAKE ROOT IN A SIEVE: ONE REMEDY.

Plants that take root in a sieve that has been thrown in a hedge-row, if gathered and worn upon the person by a pregnant woman, will facilitate delivery.

CHAP. 110.—PLANTS GROWING UPON DUNGHILLS: ONE REMEDY.

A plant that has been grown upon a dungheap in a field, is a very efficacious remedy, taken in water, for quinzy.

CHAP. 111.—PLANTS THAT HAVE BEEN MOISTENED WITH THE URINE OF A DOG: ONE REMEDY.

A plant upon which a dog has watered, torn up by the roots, and not touched with iron, is a very speedy cure for sprains.

CHAP. 112.—THE RODARUM: THREE REMEDIES.

We have already[24] made mention of the rumpotinus, when speaking of the vine-growing[25] trees. Near the tree, when not

of a statue. Numerous mosses grow upon marble; and statues are gradually covered, Fée says, with the Byssus antiquitatis.

[23] "Tongue" plant. Fée identifies it with the Scolopendrium officinarum of Willdenow, the Lingua cervina of other botanists. See B. xxv. c. 84.

[24] In B. xiv. c. 3.

[25] Or "vine-supporting."

accompanied by the vine, there grows a plant, known to the Gauls as the "rodarum."[26] It has a knotted stem like the branch of a fig-tree, and the leaves, which are very similar to those of the nettle, are white in the middle, though in process of time they become red all over. The blossom of it is of a silvery hue. Beaten up with stale axle-grease, due care being taken not to touch it with iron, this plant is extremely useful for tumours, inflammations, and gatherings; the patient, however, on being anointed with it must spit three times on the right side. They say too, that as a remedy it is still more efficacious, if three persons of three different nations rub the right side of the body with it.

CHAP. 113.—THE PLANT CALLED IMPIA: TWO REMEDIES.

The plant called "impia"[27] is white, resembling rosemary in appearance. It is clothed with leaves like a thyrsus, and is terminated by a head, from which a number of small branches protrude, terminated, all of them, in a similar manner. It is this peculiar conformation that has procured for it the name of "impia," from the progeny thus surmounting the parent. Some persons, however, are of opinion that it is so called because no animal will touch it. Bruised between two stones it yields an effervescent juice, which, in combination with wine and milk, is remarkably efficacious for quinzy.

There is a marvellous property attributed to this plant, to the effect that persons who have once tasted it will never be attacked by quinzy; for which reason it is given to swine: those among them, however, which refuse to take it will be sure to die of that disease. Some persons too are of opinion that if slips of it are put into a bird's nest, they will effectually prevent the young birds from choking themselves by eating too voraciously.

CHAP. 114.—THE PLANT CALLED VENUS' COMB: ONE REMEDY.

From its resemblance to a comb, they give the name of "Venus' comb"[29] to a certain plant, the root of which, bruised

[26] Fée suggests that this may possibly be the Spiræa ulmaria of Linnæus.

[27] The "impious" or "unnatural" plant. Fée identifies it with the Filago Gallica of Linnæus, the corn cudweed. It is destitute of medicinal properties, and what Pliny states is without foundation.

[29] Generally identified with the Scandix pecten Veneris, corn cicely, or shepherd's needle. See B. xxii. c. 38.

with mallows, extracts all foreign substances from the human body.

CHAP. 115.—THE EXEDUM. THE PLANT CALLED NOTIA: TWO REMEDIES.

The plant called "exedum"[30] is curative of lethargy. The herbaceous plant called "notia," which is used by curriers for dyeing leather a bright, cheerful colour, and known by them under various names—is curative of cancerous ulcers; I find it also stated that, taken in wine or in oxycrate, it is extremely efficacious for stings inflicted by scorpions.

CHAP. 116.—THE PHILANTHROPOS: ONE REMEDY. THE LAPPA CANARIA: TWO REMEDIES.

The Greeks wittily give the name of "philanthropos"[31] to a certain plant, because it attaches itself to articles of dress.[32] A chaplet made of this plant has the effect of relieving headache.

As to the plant known as the "lappa canaria,"[33] beaten up in wine with plantago and millefolium,[34] it effects the cure of carcinomatous sores, the application being removed at the end of three days. Taken out of the ground without the aid of iron, and thrown into their wash, or given to them in wine and milk, it cures diseases in swine. Some persons add, however, that the person, as he takes it up, must say—"This is the plant argemon, a remedy discovered by Minerva for such swine as shall taste thereof."

CHAP. 117.—TORDYLON OR SYREON: THREE REMEDIES.

Tordylon is, according to some authorities, the seed of sili,[35] while according to others it is a distinct plant,[36] known also as "syreon." I find no particulars relative to it, except that

[30] Fée queries whether this may not possibly be the Rhus coriaria of Linnæus, elm-leaved sumach, mentioned in B. xiii. c. 13. He would appear, however, to have confounded it with the Notia, next mentioned.

[31] "Man-loving," or rather "attached to man." Identified with the Galium aparine of Linnæus, goose-grass, or common ladies bedstraw; the seeds of which attach themselves to the dress.

[32] See B. xxi. c. 64.

[33] The dog-bur. The Lappa tomentosa of Lamarck. See B. xxvi. c. 65.

[34] See c. 95 of this Book.

[35] Or hartwort; see B. xx. cc. 18, 87.

[36] The Tordylium officinale of Linnæus, officinal hart-wort.

it grows upon mountains, and that the ashes of it, taken in drink, act as an emmenagogue and facilitate expectoration. It is stated also, that for this last purpose the root is even more efficacious than the stem; that the juice of it, taken in doses of three oboli, cures diseases of the kidneys; and that the root is used as an ingredient for emollient plasters.

### CHAP. 118.—GRAMEN: SEVENTEEN REMEDIES.

Gramen[37] is of all herbaceous productions the most common. As it creeps along the ground it throws out jointed stems, from the joints of which, as well as from the extremity of the stem, fresh roots are put forth every here and there. In all other parts of the world the leaves of it are tapering, and come to a point; but upon Mount Parnassus[38] they resemble the leaves of the ivy, the plant throwing out a greater number of stems than elsewhere, and bearing a blossom that is white and odoriferous. There is no vegetable production that is more grateful[39] to beasts of burden than this, whether in a green state or whether dried and made into hay, in which last case it is sprinkled with water when given to them. It is said that on Mount Parnassus a juice is extracted from it, which is very abundant and of a sweet flavour.

In other parts of the world, instead of this juice a decoction of it is employed for closing wounds; an effect equally produced by the plant itself, which is beaten up for the purpose and attached to the part affected, thereby preventing inflammation. To the decoction wine and honey are added, and in some cases, frankincense, pepper, and myrrh, in the proportion of one third of each ingredient; after which it is boiled again in a copper vessel, when required for tooth-ache or defluxions of the eyes. A decoction of the roots, in wine, is curative of griping pains in the bowels, strangury, and ulcerations of the bladder, and it disperses calculi. The seed is still more powerful as a diuretic,[40] arrests looseness and vomiting, and is particularly

[37] "Grass." The Triticum repens, or Paspalum dactylon of Linnæus, our couch-grass.

[38] This is probably quite a different production, being the Parnassia palustris, according to Dodonæus; but Fée is inclined to think that it is the Campanula rapunculus of Linnæus, bell-flower or rampions.

[39] Fée thinks that this appplies to the plant of Parnassus, and not to the common Gramen.

[40] This property, Fée says, is still attributed to couch-grass.

useful for wounds inflicted by dragons.[41] There are some authorities which give the following prescription for the cure of scrofulous sores and inflamed tumours:—From one, two, or three stems, as many as nine joints must be removed, which must then be wrapped in black wool with the grease in it. The party who gathers them must do so fasting, and must then go, in the same state, to the patient's house while he is from home. When the patient comes in, the other must say to him three times, "I come fasting to bring a remedy to a fasting man;" and must then attach the amulet to his person, repeating the same ceremony three consecutive days. The variety of this plant which has seven[42] joints is considered a most excellent amulet for the cure of head-ache. For excruciating pains in the bladder, some recommend a decoction of gramen, boiled down in wine to one half, to be taken immediately after the bath.

### CHAP. 119.—DACTYLOS; FIVE REMEDIES.

There are some authorities who mention three varieties of the pointed gramen. That which has at the extremity five[43] points at the utmost, is called "dactylos." Twisting these points together, persons introduce them into the nostrils and then withdraw them, with the view of preventing hæmorrhage. The second kind, which resembles aizoön,[44] is employed with axle-grease for whitlows and hangnails, and for fleshy excrescences upon the nails: this also is called "dactylos," because it is so useful as a remedy for diseases of the fingers.

The third[45] kind, which is also known as "dactylos," is more diminutive, and is found growing upon walls or tiles. It has certain caustic properties, and arrests the progress of serpiginous ulcers. By placing a wreath of gramen round the head, bleeding at the nose is stopped. In Babylonia, it is said, the gramen[46] which grows by the wayside is fatal to camels.

[41] "Draconum." A peculiar kind of serpent. See Lucan's Pharsalia, B. ix. ll. 727-8.

[42] No such variety is known.

[43] Fée is somewhat at a loss as to its identity, but thinks that it may be the Panicum sanguinale of Linnæus, or possibly the Cynodon dactylon.

[44] See B. xix. c. 58, and B. xxv. c. 102. Possibly a Sedum or houseleek, Fée thinks; certainly not a grass.

[45] Fée queries whether this may not be the Poa rigida of Linnæus, hard meadow-grass.

[46] An Euphorbia, Fée thinks.

CHAP. 120.—FENUGREEK OR SILICIA: THIRTY-ONE REMEDIES.

Nor is fenugreek held in less esteem. By some it is known as "telis," by others as "carphos," and by others again as "buceras,"[47] or "ægoceras,"[47] the produce of it bearing some resemblance to horns. Among us it is known as "silicia." The mode of sowing it we have already[48] described on the appropriate occasion. Its properties are desiccative,[49] emollient, and resolvent. A decoction of it is useful for many female maladies, indurations for instance, tumours, and contractions of the uterus; in all which cases it is employed as a fomentation or used for a sitting-bath: it is serviceable also as an injection. It removes cutaneous eruptions on the face; and a decoction of it, applied topically with nitre or vinegar, cures diseases of the spleen or liver. In cases of difficult labour, Diocles recommends the seed pounded, in doses of one acetabulum, mixed with boiled[50] must. After taking one third of the mixture, the patient must use a warm bath, and then, while in a perspiration, she must take another third, and, immediately after leaving the bath, the remainder—this, he says, will prove a most effectual means of obtaining relief.

The same authority recommends fenugreek boiled, with barley or linseed, in hydromel, as a pessary for violent pains in the uterus: he prescribes it also as an external application for the lower regions of the abdomen. He speaks also of treating leprous sores and freckles with a mixture composed of equal proportions of sulphur and meal of fenugreek, recommending it to be applied repeatedly in the course of the day, due care being taken not to rub the part affected.

For the cure of leprosy, Theodorus prescribes a mixture of fenugreek, and one fourth part of cleaned nasturtium, the whole to be steeped in the strongest vinegar. Damion used to give a potion by way of emmenagogue, consisting of half an acetabulum of fenugreek seed in nine cyathi of boiled must[51] and water. There is no doubt too, that a decoction of it is remarkably useful for diseases of the uterus and for ulcerations

[47] "Bull's horn" or "goat's horn." [48] In B. xviii. c. 39.

[49] The seed contains a mucilage, and is considered emollient and resolvent. Till recently, Fenugreek was the base, Fée says, of a plaster held in high esteem.

[50] "Sapa." Grape-juice boiled down to one-third.

[51] "Sapa."

of the intestines, and that the seed is beneficial for affections of the joints and chest. Boiled with mallows and then taken in honied wine, fenugreek is extolled in the highest terms, as serviceable for affections of the uterus and intestines. Indeed, the very steam that arises from the decoction may be productive of considerable benefit. A decoction too of fenugreek seed is a corrective of the rank odours of the armpits. Meal of fenugreek, with wine and nitre, speedily removes ring-worm and dandriff of the head; and a decoction of it in hydromel, with the addition of axle-grease, is used for the cure of diseases of the generative organs, inflamed tumours, imposthumes of the parotid glands, gout in the feet and hands, maladies of the joints, and denudations of the bones. Kneaded with vinegar, it effects the cure of sprains, and, boiled in oxymel only, it is used as a liniment for affections of the spleen. Kneaded with wine, it acts as a detergent upon carcinomatous sores; after which, applied with honey, it effects a perfect cure. A pottage too is made of this meal, which is taken for ulcerations of the chest and chronic coughs; it is kept boiling a considerable time, in order to remove the bitterness,[52] after which honey is added.

We shall now proceed to speak of the plants which have gained a higher degree of reputation.

SUMMARY.—Remedies, narratives, and observations, eleven hundred and seventy-six.

ROMAN AUTHORS QUOTED.—C. Valgius,[53] Pompeius Lenæus,[54] Sextius Niger[55] who wrote in Greek, Julius Bassus[56] who wrote in Greek, Antonius Castor,[57] Cornelius Celsus.[58]

FOREIGN AUTHORS QUOTED.—Theophrastus,[59] Apollodorus,[60] Democritus,[61] Orpheus,[62] Pythagoras,[63] Mago,[64] Menan-

[52] Fée remarks, that in reality there is no bitterness in fenugreek. He suggests therefore, that the meaning may be "offensive smell," that emitted by fenugreek being far from agreeable.

[53] See end of B. xx.
[54] See end of B. xiv.
[55] See end of B. xii.
[56] See end of B. xx.
[57] See end of B. xx.
[58] See end of B. vii.
[59] See end of B. iii.
[60] See end of B. xi.
[61] See end of B. ii.
[62] See end of B. xx.
[63] See end of B. ii.
[64] See end of B. viii.

der[65] who wrote the "Biochresta," Nicander,[66] Homer, Hesiod,[67] Musæus,[68] Sophocles,[69] Anaxilaüs.[70]

MEDICAL AUTHORS QUOTED.—Mnesitheus,[71] Callimachus,[72] Phanias[73] the physician, Timaristus,[74] Simus,[75] Hippocrates,[76] Chrysippus,[77] Diocles,[78] Ophelion,[79] Heraclides,[80] Hicesius,[81] Dionysius,[82] Apollodorus[83] of Citium, Apollodorus[84] of Tarentum, Praxagoras,[85] Plistonicus,[86] Medius,[87] Dieuches,[88] Cleophantus,[89] Philistion,[90] Asclepiades,[91] Crateuas,[92] Petronius Diodotus,[93] Iollas,[94] Erasistratus,[95] Diagoras,[96] Andreas, Mnesides,[97] Epicharmus,[98] Damion,[99] Sosimenes,[1] Tlepolemus,[2] Metrodorus,[3] Solon,[4] Lycus,[5] Olympias[6] of Thebes, Philinus,[7] Petrichus,[8] Micton,[9] Glaucias,[10] Xenocrates.[11]

65 See end of B. xix.
66 See end of B. viii.
67 See end of B. vii.
68 See end of B. xxi.
69 See end of B. xxi.
70 See end of B. xxi.
71 See end of B. xxi.
72 See end of B. iv.
73 See end of B. xxi.
74 See end of B. xxi.
75 See end of B. xxi.
76 See end of B. vii.
77 See end of B. xx.
78 See end of B. xx.
79 See end of B. xx.
80 See end of B. xii.
81 See end of B. xxv.
82 See end of B. xxii.
83 See end of B. xx.
84 See end of B. xx.
85 See end of B. xx.
86 See end of B. xx.
87 See end of B. xx.
88 See end of B. xx.
89 See end of B. xx.
90 See end of B. xx.
91 See end of B. vii.
92 See end of B. xx.
93 See end of B. xx.
94 See end of B. xii.
95 See end of B. xi.
96 See end of B. xii.
97 See end of B. xx.
98 See end of B. xii.
99 See end of B. xx.
1 See end of B. xx.
2 See end of B. xx.
3 See end of B. xx.
4 See end of B. xx.
5 See end of B. xx.
6 See end of B. xii.
7 See end of B xx.
8 See end of B. xx.
9 See end of B. xix.
10 See end of B. xx.
11 See end of B. xx.
12 See end of B. xx.

# BOOK XXV.

## THE NATURAL HISTORY OF THE WILD PLANTS.

### CHAP. 1. (1.)—WHEN THE WILD PLANTS WERE FIRST BROUGHT INTO USE.

THE more highly esteemed plants of which I am now about to speak, and which are produced by the earth for medicinal purposes solely, inspire me with admiration of the industry and laborious research displayed by the ancients. Indeed there is nothing that they have not tested by experiment or left untried; no discovery of theirs which they have not disclosed, or which they have not been desirous to leave for the benefit of posterity. We, on the contrary, at the present day, make it our object to conceal and suppress the results of our labours, and to defraud our fellow-men of blessings even which have been purchased by others. For true it is, beyond all doubt, that those who have gained any trifling accession of knowledge, keep it to themselves, and envy the enjoyment of it by others; to leave mankind uninstructed being looked upon as the high prerogative of learning. So far is it from being the habit with them to enter upon new fields of discovery, with the view of benefitting mankind at large, that for this long time past it has been the greatest effort of the ingenuity of each, to keep to himself the successful results of the experience of former ages, and so bury them for ever!

And yet, by Hercules! a single invention before now has elevated men to the rank of gods; and how many an individual has had his name immortalized in being bestowed upon some plant which he was the first to discover, thanks to the gratitude which prompted a succeeding age to make some adequate return! If it had been expended solely upon the plants which are grown to please the eye, or which invite us by their nutrimental properties, this laborious research on the part of the ancients would not have been so surprising; but in addition to this, we find them climbing by devious tracts to the very summit of mountains, penetrating to the very

heart of wilds and deserts, and searching into every vein and fibre of the earth—and all this, to discover the hidden virtues of every root, the properties of the leaf of every plant, and the various purposes to which they might be applied; converting thereby those vegetable productions, which the very beasts of the field refuse to touch, into so many instruments for our welfare.

CHAP. 2. (2.)—THE LATIN AUTHORS WHO HAVE WRITTEN UPON THESE PLANTS.

This subject has not been treated of by the writers in our own language so extensively as it deserves, eager as they have proved themselves to make enquiry into everything that is either meritorious or profitable. M. Cato, that great master in all useful knowledge, was the first, and, for a long time, the only author who treated of this branch[1] of learning; and briefly as he has touched upon it, he has not omitted to make some mention of the remedial treatment of cattle. After him, another illustrious personage, C. Valgius,[2] a man distinguished for his erudition, commenced a treatise upon the same subject, which he dedicated to the late Emperor Augustus, but left unfinished. At the beginning of his preface, replete as it is with a spirit of piety,[3] he expresses a hope that the majestic sway of that prince may ever prove a most efficient remedy for all the evils to which mankind are exposed.

CHAP. 3.—AT WHAT PERIOD THE ROMANS ACQUIRED SOME KNOWLEDGE OF THIS SUBJECT.

The only[4] person among us, at least so far as I have been able to ascertain, who had treated of this subject before the time of Valgius, was Pompeius Lenæus,[5] the freedman of Pompeius Magnus; and it was in his day, I find, that this branch of knowledge first began to be cultivated among us. Mithridates, the most powerful monarch of that period, and who was finally conquered by Pompeius, is generally thought to have been a

[1] As Fée remarks, it is more as a writer upon Agriculture than upon Materia Medica, that Cato is entitled to the thanks of posterity.

[2] See end of B. xx.

[3] His piety, apparently, was tainted with adulation.

[4] With the exception of Cato, of course.

[5] See end of B. xiv.

more zealous promoter of discoveries for the benefit of mankind, than any of his predecessors—a fact evinced not only by many positive proofs, but by universal report as well. It was he who first thought, the proper precautions being duly taken, of drinking poison every day; it being his object, by becoming habituated to it, to neutralize its dangerous effects. This prince was the first discoverer too of the various kinds of antidotes, one[6] of which, indeed, still retains his name; and it is generally supposed that he was the first to employ the blood of the ducks of Pontus as an ingredient in antidotes, from the circumstance that they derive their nutriment from poisons.[7]

It was to Mithridates that Asclepiades,[8] that celebrated physician, dedicated his works, still extant, and sent them, as a substitute for his own personal attendance, when requested by that monarch to leave Rome and reside at his court. It is a well-known fact, that this prince was the only person that was ever able to converse in so many as two-and-twenty languages, and that, during the whole fifty-six years of his reign, he never required the services of an interpreter when conversing with any individuals of the numerous nations that were subject to his sway.

Among the other gifts of extraordinary genius with which he was endowed, Mithridates displayed a peculiar fondness for enquiries into the medical art; and gathering items of information from all his subjects, extended, as they were, over a large proportion of the world, it was his habit to make copies of their communications, and to take notes of the results which upon experiment had been produced. These memoranda, which he kept in his private cabinet,[9] fell into the hands of Pompeius, when he took possession of the royal treasures; who at once commissioned his freedman, Lenæus the grammarian, to translate them into the Latin language: the result of which was, that his victory was equally conducive to the benefit of the republic and of mankind at large.

[6] See c. 79 of this Book: also B. xxiii. c. 77, and B. xxix. c. 8.

[7] A mere prejudice, arising from the fact that numerous poisonous plants grew in the countries on the shores of the Euxine. The blood of no animal whatever is an antidote to any poison.

[8] See B. vii. c. 37. An interesting account of his system will be found in B. xxvi. c. 7. See also B. xxix. c. 5.

[9] See B. xxiii. c. 77.

CHAP. 4.—GREEK AUTHORS WHO HAVE DELINEATED THE PLANTS IN COLOURS.

In addition to these, there are some Greek writers who have treated of this subject, and who have been already mentioned on the appropriate occasions. Among them, Crateuas, Dionysius, and Metrodorus, adopted a very attractive method of description, though one which has done little more than prove the remarkable difficulties which attended it. It was their plan to delineate the various plants in colours, and then to add in writing a description of the properties which they possessed. Pictures, however, are very apt to mislead, and more particularly where such a number of tints is required, for the imitation of nature with any success; in addition to which, the diversity of copyists from the original paintings, and their comparative degrees of skill, add very considerably to the chances of losing the necessary degree of resemblance to the originals. And then, besides, it is not sufficient to delineate a plant as it appears at one period only, as it presents a different appearance at each of the four seasons of the year.[10]

CHAP. 5.—THE FIRST GREEK AUTHORS WHO WROTE UPON PLANTS.

Hence it is that other writers have confined themselves to a verbal description of the plants; indeed some of them have not so much as described them even, but have contented themselves for the most part with a bare recital of their names, considering it sufficient if they pointed out their virtues and properties to such as might feel inclined to make further enquiries into the subject. Nor is this a kind of knowledge by any means difficult to obtain; at all events, so far as regards myself, with the exception of a very few, it has been my good fortune to examine them all, aided by the scientific researches of Antonius Castor,[11] who in our time enjoyed the highest reputation for an intimate acquaintance with this branch of knowledge. I had the opportunity of visiting his garden, in which, though he had passed his hundredth year, he cultivated vast numbers of plants with the greatest care. Though he had reached this great age, he had never experienced

[10] The four great changes in plants, though not always at the four seasons of the year, are the budding and foliation, the blossoming, the fructification, and the fall of the leaf.

[11] See end of B. xx.

any bodily ailment, and neither his memory nor his natural vigour had been the least impaired by the lapse of time.

There was nothing more highly admired than an intimate knowledge of plants, in ancient times. It is long since the means were discovered of calculating before-hand, not only the day or the night, but the very hour even at which an eclipse of the sun or moon is to take place; and yet the greater part of the lower classes still remain firmly persuaded that these phænomena are brought about by compulsion, through the agency of herbs and enchantments, and that the knowledge of this art is confined almost exclusively to females. What country, in fact, is not filled with the fabulous stories about Medea of Colchis and other sorceresses, the Italian Circe in particular, who has been elevated to the rank of a divinity even? It is with reference to her, I am of opinion, that Æschylus,[12] one of the most ancient of the poets, asserts that Italy is covered with plants endowed with potent effects, and that many writers say the same of Circeii,[13] the place of her abode. Another great proof too that such is the case, is the fact, that the nation of the Marsi,[14] descendants of a son of Circe, are well known still to possess the art of taming serpents.

Homer, that great parent of the learning and traditions of antiquity, while extolling the fame of Circe in many other respects, assigns to Egypt the glory of having first discovered the properties of plants, and that too at a time when the portion of that country which is now watered by the river Nilus was not in existence, having been formed at a more recent period by the alluvion[15] of that river. At all events, he states[16] that numerous Egyptian plants were sent to the Helena of his story, by the wife of the king of that country, together with the celebrated nepenthes,[17] which ensured oblivion of all sorrows and forgetfulness of the past, a potion which Helena was to administer to all mortals. The first person, however, of whom the remembrance has come down to us, as having

[12] There is little doubt that he alludes to the passage of Æschylus, quoted by Theophrastus, Hist. Plant. B. ix. c. 15. *Τυῤῥήνων γενεαν φαρμακοποιὸν ἔθνος*—"The race of the Tyrrheni, a drug-preparing nation."

[13] See B. ii. c. 87, B. iii. c. 9, B. xv. c. 36, and B. xxxii. c. 21.

[14] See B. vii. c. 2.

[15] See B. ii. c. 87.

[16] Od. iv. 228, *et seq.*

[17] See B. xxi. c. 91.

treated with any degree of exactness on the subject of plants, is Orpheus; and next to him Musæus and Hesiod, of whose admiration of the plant called polium we have already made some mention on previous occasions.[18] Orpheus and Hesiod too we find speaking in high terms of the efficacy of fumigations. Homer also speaks of several other plants by name, of which we shall have occasion to make further mention in their appropriate places.

In later times again, Pythagoras, that celebrated philosopher, was the first to write a treatise on the properties of plants, a work in which he attributes the origin and discovery of them to Apollo, Æsculapius, and the immortal gods in general. Democritus too, composed a similar work. Both of these philosophers had visited the magicians of Persia, Arabia, Æthiopia, and Egypt, and so astounded were the ancients at their recitals, as to learn to make assertions which transcend all belief. Xanthus, the author of some historical works, tells us, in the first of them, that a young dragon[19] was restored to life by its parent through the agency of a plant to which he gives the name of "ballis," and that one Tylon, who had been killed by a dragon, was restored to life and health by similar means. Juba too assures us that in Arabia a man was resuscitated by the agency of a certain plant. Democritus has asserted—and Theophrastus believes it—that there is a certain herb in existence, which, upon being carried thither by a bird, the name of which we have already[20] given, has the effect, by the contact solely, of instantaneously drawing a wedge from a tree, when driven home by the shepherds into the wood.

These marvels, incredible as they are, excite our admiration nevertheless, and extort from us the admission that, making all due allowance, there is much in them that is based on truth. Hence it is too that I find it the opinion of most writers, that there is nothing which cannot be effected by the agency of plants, but that the properties of by far the greater part of them remain as yet unknown. In the number of these was Herophilus, a celebrated physician, a saying of whose is reported, to the effect that some plants may possibly exercise a beneficial influence, if only trodden under foot. Be this as it may, it has been remarked more than once, that wounds and

[18] See B. xxi. cc. 21, 84.

[19] Or serpent.

[20] In B. x. c. 20.

maladies are sometimes inflamed[21] upon the sudden approach of persons who have been journeying on foot.

CHAP. 6.—WHY A FEW OF THE PLANTS ONLY HAVE BEEN USED MEDICINALLY. PLANTS, THE MEDICINAL PROPERTIES OF WHICH HAVE BEEN MIRACULOUSLY DISCOVERED. THE CYNORRHODOS: TWO REMEDIES. THE PLANT CALLED DRACUNCULUS: ONE REMEDY. THE BRITANNICA: FIVE REMEDIES.

Such was the state of medical knowledge in ancient times, wholly concealed as it was in the language of the Greeks. But the main reason why the medicinal properties of most plants remain still unknown, is the fact that they have been tested solely by rustics and illiterate people, such being the only class of persons that live in the midst of them: in addition to which, so vast is the multitude of medical men always at hand, that the public are careless of making any enquiries about them. Indeed, many of those plants, the medicinal properties of which have been discovered, are still destitute of names—such, for instance, as the one which we mentioned[22] when speaking of the cultivation of grain, and which we know for certain will have the effect of keeping birds away from the crops, if buried at the four corners of the field.

But the most disgraceful cause of all, why so few simples are known, is the fact that those even who are acquainted with them are unwilling to impart their knowledge; as though, forsooth, they should lose for ever anything that they might think fit to communicate to others! Added to all this, there is no well-ascertained method to guide us to the acquisition of this kind of knowledge; for, as to the discoveries that have been made already, they have been due, some of them, to mere accident, and others again, to say the truth, to the interposition of the Deity.

Down to our own times, the bite of the mad dog, the symptoms of which are a dread of water and an aversion to every kind of beverage, was incurable;[23] and it was only recently that

[21] Most probably by the agency of "feverish expectation" on the part of the patient.

[22] In B. xviii. c. 45.

[23] As Fée remarks, this dreadful malady is still incurable, notwithstanding the eulogiums which have been lavished upon the virtues of the Scutellaria laterifolia of Linnæus, the Alisma plantago, Genista tinctoria, and other plants, as specifics for its cure.

the mother of a soldier who was serving in the prætorian guard, received a warning in a dream, to send her son the root of the wild rose, known as the cynorrhodos,[24] a plant the beauty of which had attracted her attention in a shrubbery the day before, and to request him to drink the extract of it. The army was then serving in Lacetania, the part of Spain which lies nearest to Italy; and it so happened that the soldier, having been bitten by a dog, was just beginning to manifest a horror of water when his mother's letter reached him, in which she entreated him to obey the words of this divine warning. He accordingly complied with her request, and, against all hope or expectation, his life was saved; a result[25] which has been experienced by all who have since availed themselves of the same resource. Before this, the cynorrhodos had been only recommended by writers for one medicinal purpose; the spongy excrescences, they say, which grow[26] in the midst of its thorns, reduced to ashes and mixed with honey, will make the hair grow again when it has been lost by alopecy. I know too, for a fact, that in the same province there was lately discovered in the land belonging to a person with whom I was staying, a stalked plant, the name given to which was dracunculus.[27] This plant, about an inch in thickness, and spotted with various colours, like a viper's skin, was generally reported to be an effectual preservative against the sting of all kinds of serpents. I should remark, however, that it is a different plant from the one of the same name of which mention has been made in the preceding Book,[28] having altogether another shape and appearance. There is also another marvellous property belonging to it: in spring, when the serpents begin to cast their slough, it shoots up from the ground to the height of about a couple of feet, and again, when they retire for the winter it conceals itself within the earth, nor is there a serpent to be seen so long as it remains out of sight. Even if this plant did nothing else but warn us of impending danger, and tell us when to be on our guard, it could not be looked upon otherwise than as a beneficent provision made by Nature in our behalves.

[24] Dog-rose, or eglantine. See B. viii. c. 63.

[25] An unwarranted assertion, no doubt.

[26] He alludes to a substance known to us as "bedeguar," a kind of gall-nut, produced by the insect called Cynips rosæ.

[27] Or "little dragon." The Arum dracunculus of Linnæus. See B. xxiv. cc. 91, 93.

[28] In c. 93.

(3.) It is not, however, the animals only that are endowed with certain baneful and noxious properties, but, sometimes, waters[29] even, and localities as well. Upon one occasion, in his German campaign, Germanicus Cæsar had pitched his camp beyond the river Rhenus; the only fresh water to be obtained being that of a single spring in the vicinity of the sea-shore. It was found, however, that within two years the habitual use of this water was productive of loss of the teeth and a total relaxation of the joints of the knees: the names given to these maladies, by medical men, were "stomacace"[30] and "sceloturbe." A remedy for them was discovered, however, in the plant known as the "britannica,"[31] which is good, not only for diseases of the sinews and mouth, but for quinzy[32] also, and injuries inflicted by serpents. This plant has dark oblong leaves and a swarthy root: the name given to the flower of it is "vibones,"[33] and if it is gathered and eaten before thunder has been heard, it will ensure safety in every respect. The Frisii, a nation then on terms of friendship with us, and within whose territories the Roman army was encamped, pointed out this plant to our soldiers: the name[34] given to it, however,

[29] As Fée remarks, the influence of water impregnated with selenite upon the health is well known.

[30] Fée says that this disease was an "intense gastritis, productive of a fetid breath." It would seem, however, to be neither more nor less than the malady now known as "scurvy of the gums." Galen describes the "sceloturbe," as a kind of paralysis. "Stomacace" means "disease of the mouth;" "sceloturbe" "disease of the legs."

[31] Sprengel and Desfontaines identify it with the Rumex aquaticus, but Fée considers it to be the Inula Britannica of Linnæus. The Statice armeria, Statice plantaginea, and Polygonum persicaria have also been suggested.

[32] The pseudo-Apuleius, in B. xxix. t. 7, says, that if gathered before thunder has been heard, it will be a preservative against quinzy for a whole year.

[33] The flower of the Inula Britannica, Fée says, is much more likely, from its peculiarities, to have merited a peculiar name, than that of the Rumex.

[34] Lipsius, in his Commentaries upon Tacitus, Ann. i. 63, has very satisfactorily shown that it did not derive its name from the islands of Britain, but from a local appellation, the name given by the natives to the marshy tracts upon the banks of the Ems, between Lingen and Covoerden, which are still known as the "Bretaasche Heyde." Munting and Poinsinet de Sivry suggest that it may have received its name from being used as a strengthener of the teeth in their sockets, being compounded of the words *tann*, "tooth," and *brita*, "to break."

rather surprises me, though possibly it may have been so called because the shores of Britannia are in the vicinity, and only separated by the ocean. At all events, it was not called by this name from the fact of its growing there in any great abundance, that is quite certain, for at the time I am speaking of, Britannia was still independent.[35]

CHAP. 7.—WHAT DISEASES ARE ATTENDED WITH THE GREATEST PAIN. NAMES OF PERSONS WHO HAVE DISCOVERED FAMOUS PLANTS.

In former times there was a sort of ambition, as it were, of adopting plants, by bestowing upon them one's name, a thing that has been done before now by kings even, as we shall have occasion to show:[36] so desirable a thing did it appear to have made the discovery of some plant, and thus far to have contributed to the benefit of mankind. At the present day, however, it is far from impossible that there may be some who will look upon these researches of ours as frivolous even, so distasteful to a life of ease and luxury are the very things which so greatly conduce to our welfare.

Still, however, it will be only right to mention in the first place those plants the discoverers of which are known, their various properties being classified[37] according to the several maladies for the treatment of which they are respectively employed: in taking a review of which one cannot do otherwise than bewail the unhappy lot of mankind, subject as it is, in addition to chances and changes, and those new afflictions which every hour is bringing with it, to thousands of diseases which menace the existence of each mortal being. It would seem almost an act of folly to attempt to determine which of these diseases is attended with the most excruciating pain, seeing that every one is of opinion that the malady with which for the moment he himself is afflicted, is the most excruciating and insupportable. The general experience, however, of the present age has come to the conclusion, that the most agonizing torments are those attendant upon strangury, resulting from calculi in the bladder; next to them, those arising from maladies of the stomach; and in the third place, those caused by pains and affections of the head; for it is more generally in

[35] And therefore comparatively unknown.
[36] In c. 33, *et seq.*, of this Book.
[37] In the next Book.

these cases, we find, and not in others, that patients are tempted to commit suicide.

For my own part, I am surprised that the Greek authors have gone so far as to give a description of noxious plants even; in using which term, I wish it to be understood that I do not mean the poisonous plants merely; for such is our tenure of life that death is often a port of refuge to even the best of men. We meet too, with one case of a somewhat similar nature, where M. Varro speaks of Servius Clodius,[38] a member of the Equestrian order, being so dreadfully tormented with gout, that he had his legs rubbed all over with poisons, the result of which was, that from that time forward all sensation, equally with all pain, was deadened in those parts of his body. But what excuse, I say, can there be for making the world acquainted with plants, the only result of the use of which is to derange the intellect, to produce abortion, and to cause numerous other effects equally pernicious? So far as I am concerned, I shall describe neither abortives nor philtres, bearing in mind, as I do, that Lucullus, that most celebrated general, died of the effects of a philtre.[39] Nor shall I speak of other ill-omened devices of magic, unless it be to give warning against them, or to expose them, for I most emphatically condemn all faith and belief in them. It will suffice for me, and I shall have abundantly done my duty, if I point out those plants which were made for the benefit of mankind, and the properties of which have been discovered in the lapse of time.

### CHAP. 8. (4.)—MOLY: THREE REMEDIES.

According to Homer,[40] the most celebrated of all plants is that, which, according to him, is known as moly[41] among the

[38] See the case of M. Agrippa, mentioned in B. xxiii. c. 27.

[39] Said, by Plutarch, to have been administered to him by his freedman Callisthenes, with the view of securing his affection.

[40] Od. x. l. 302, *et seq.*

[41] Fée devotes a couple of pages to the *vexata quæstio* of the identification of this plant, and comes to the conclusion that the Moly of Homer, mentioned on the present occasion, and of Theophrastus, Ovid, and the poets in general is only an imaginary plant; that the white-flowered Moly of Dioscorides and Galen is identical with the Allium Dioscoridis of Sibthorpe; and that the yellow-flowered Moly of the author of the Priapeia is not improbably the Allium Moly or magicum of Linnæus. Sprengel

gods. The discovery of it he attributes to Mercury, who was also the first to point out its uses as neutralizing the most potent spells of sorcery. At the present day, it is said, it grows in the vicinity of Lake Pheneus, and in Cyllene, a district of Arcadia. It answers the description given of it by Homer, having a round black root, about as large as an onion, and a leaf like that of the squill: there is no[42] difficulty experienced in taking it up. The Greek writers have delineated[43] it as having a yellow flower, while Homer,[44] on the other hand, has spoken of it as white. I once met with a physician, a person extremely well acquainted with plants, who assured me that it is found growing in Italy as well, and that he would send me in a few days a specimen which had been dug up in Campania, with the greatest difficulty, from a rocky soil. The root of it was thirty[45] feet in length, and even then it was not entire, having been broken in the getting up.

### CHAP. 9.—THE DODECATHEOS: ONE REMEDY.

The plant next in esteem to moly, is that called dodecatheos,[46] it being looked upon as under the especial tutelage of all the superior gods.[47] Taken in water, it is a cure, they say, for maladies of every kind. The leaves of it, seven in number, and very similar to those of the lettuce, spring from a yellow root.

### CHAP. 10.—THE PÆONIA, PENTOROBUS, OR GLYCYSIDE: ONE REMEDY.

The plant known as "pæonia"[48] is the most ancient of them all. It still retains the name[49] of him who was the first to

derives the name "Moly" from the Arabic, and identifies it with the Allium nigrum of Linnæus.

[42] Homer says that there *is* difficulty to men, but not to the gods.

[43] In their pictures, mentioned in c. 4.

[44] Ovid, Galen, and Theophrastus, say the same.

[45] There must either be some error in the reading here, or the physician must have attempted to impose upon our author's credulity.

[46] Or "the twelve gods."

[47] Generally identified with the Primula vulgaris or officinalis of Linnæus. Its leaves, however, are of varying number, and not like those of the lettuce. The Dodecatheos Meadia, or Virginian cowslip, it must be remembered, is an American plant.

[48] The Pæonia officinalis of Linnæus, our Peony.

[49] Pæon, the physician, mentioned in the Iliad, B. v. l. 401, as healing Pluto, when wounded by Hercules.

discover it, being known also as the "pentorobus"[50] by some, and the "glycyside"[51] by others; indeed, this is one of the great difficulties attendant on forming an accurate knowledge of plants, that the same object has different names in different districts. It grows in umbrageous mountain localities, and puts forth a stem amid the leaves, some four fingers in height, at the summit of which are four or five heads resembling Greek nuts[52] in appearance; enclosed in which, there is a considerable quantity of seed of a red or black colour. This plant is a preservative against the illusions[53] practised by the Fauni in sleep. It is generally recommended to take it up at night; for if the wood-pecker[54] of Mars should perceive a person doing so, it will immediately attack his eyes in defence of the plant.

### CHAP. 11.—THE PANACES ASCLEPION: TWO REMEDIES.

The panaces, by its very name,[55] gives assurance of a remedy for all diseases: there are numerous kinds of it, and the discovery of its properties has been attributed to the gods. One of these kinds is known by the additional name of "asclepion,"[56] in commemoration of the circumstance that Æsculapius gave the name of Panacia[57] to his daughter. The juice of it, as we have had occasion to remark already,[58] coagulates like that of fennel-giant; the root is covered with a thick rind of a salt flavour.

After this plant has been taken up, it is a point religiously observed to fill the hole with various kinds of grain, a sort of expiation, as it were, to the earth. We have already[59] stated, when speaking of the exotic productions, where and in what manner this juice is prepared, and what kind is the most esteemed. That which is imported from Macedonia is known as "bucolicon," from the fact that the neatherds there are in the habit of collecting it as it spontaneously exudes: it evaporates, however, with the greatest rapidity. As to the

[50] From its *five* seeds, which resemble *fitches*.
[51] "Sweet to the view," apparently.
[52] See B. xxiii. c. 76.
[53] He means nightmare.
[54] See B. x. cc. 18, 20, and B. xxvii. c. 60.
[55] The Greek for "all-healing."
[56] Probably the Laserpitium hirsutum of Lamarck. The Echinophora tenuifolia of Linnæus, the thin-leaved prickly parsnip, has also been named.
[57] Or "All-heal."
[58] In B. xii. c. 57.
[59] In B. xii. c. 57.

other kinds, that more particularly is held in disesteem which is black and soft, such being a proof, in fact, that it has been adulterated with wax.

CHAP. 12.—THE PANACES HERACLEON: THREE REMEDIES.

A second kind of panaces is known by the name of "heracleon,"[60] from the fact that it was first discovered by Hercules. Some persons, however, call it "Heracleotic origanum," or wild origanum, from its strong resemblance to the origanum of which we have already[61] spoken: the root of it is good for nothing.

CHAP. 13.—THE PANACES CHIRONION: FOUR REMEDIES.

A third kind of panaces is surnamed "chironion," from him[62] who first discovered it. The leaf is similar to that of lapathum, except that it is larger and more hairy; the flower is of a golden colour, and the root diminutive. It grows in rich, unctuous soils. The flower of this plant is extremely efficacious; hence it is that it is more generally used than the kinds previously mentioned.

CHAP. 14.—THE PANACES CENTAURION OR PHARNACION: THREE REMEDIES.

A fourth kind of panaces, discovered also by Chiron, is known by the additional name of "centaurion:"[63] it is also called "pharnacion," from King Pharnaces, it being a matter in dispute whether it was really discovered by Chiron or by that prince. It is grown from seed,[64] and the leaves of it are longer than those of the other kinds, and serrated at the edge. The root, which is odoriferous, is dried in the shade, and is used for imparting an aroma to wine. Some writers distin-

[60] Identified with the Laserpitium Chironium of Linnæus, otherwise called Pastinaca opopanax. Fée observes, that when the word 'Panaces' is used alone, this plant is always the one meant.

[61] In B. xx. cc. 62, 69.

[62] The Centaur Chiron; see B. vii. c. 57. Sprengel identifies this plant with the Hypericum origanifolium of Willdenow, but Fée is inclined to think that its synonym is still unknown. M. Fraäs, in his Synopsis, p. 139, identifies it with the Hypericum Olympicum, an odoriferous plant, which the H. organifolium is not.

[63] The Centaurea centaurium of Linnæus, the greater centaury.

[64] "Seritur."

guish two varieties of this plant—the one with a smooth leaf, the other of a more delicate form.

CHAP. 15.—THE HERACLEON SIDERION: FOUR REMEDIES.

The heracleon siderion[65] is also another discovery of Hercules. The stem is thin, about four fingers in length, the flower red, and the leaves like those of coriander. It is found growing in the vicinity of lakes and rivers, and is extremely efficacious for the cure of all wounds made by iron.[66]

CHAP. 16.—THE AMPELOS CHIRONIA: ONE REMEDY.

The ampelos Chironia[67] also, which we have already[68] mentioned when speaking of the vines, is a discovery due to Chiron. We have spoken too, on a previous occasion,[69] of a plant, the discovery of which is attributed to Minerva.

CHAP. 17.—HYOSCYAMOS, KNOWN ALSO AS THE APOLLINARIS OR ALTERCUM; FIVE VARIETIES OF IT: THREE REMEDIES.

To Hercules also is attributed the discovery of the plant known as the "apollinaris," and, among the Arabians, as the "altercum" or "altercangenum:" by the Greeks it is called "hyoscyamos."[70] There are several varieties of it; one of them,[71] with a black seed, flowers bordering on purple, and a prickly stem, growing in Galatia. The common kind[72] again, is whiter, more shrublike, and taller than the poppy. The seed of a third variety is similar to that of irio[73] in appearance; but they have, all of them, the effect of producing vertigo and insanity. A fourth[74] kind again is soft, lanuginous, and more unctuous than the others; the seed of it is white, and it grows in maritime localities. It is this kind that medical men

[65] Hardouin identifies it with the Geranium Robertianum of Linnæus; Sprengel and Desfontaines with the Phellandrium mutellina of Linnæus; Columna with the Sanicula; Sibthorpe with the Scrofularia lucida; and M. Fraäs with the Scrofula chrysanthemifolia of Linnæus. Fée expresses himself unable to speak with any certainty on the subject.

[66] Whence its name "sidereon."

[67] Or "Chironian vine."

[68] In B. xxiii. c. 17.

[69] In B. xxii. c. 20.

[70] "Swine's bean"—our henbane.

[71] The Hyoscyamus reticulatus of Linnæus, reticulated henbane.

[72] The Hyoscyamus niger of Linnæus, black henbane.

[73] See B. xviii. c. 22, and B. xxii. c. 75. The Hyoscyamus aureus of Linnæus, golden henbane.

[74] The Hyoscyamus albus of Linnæus, white henbane.

employ, as also that with a red seed.[75] Sometimes, however, the white seed turns of a reddish colour, if not sufficiently ripe when gathered; in which case it is rejected as unfit for use: indeed, none of these plants are gathered until they are perfectly dry. Hyoscyamos, like wine, has the property of flying to the head, and consequently of acting injuriously upon the mental faculties.

The seed is either used in its natural state, or else the juice of it is extracted: the juice also of the stem and leaves is sometimes extracted, separately from the seed. The root is sometimes made use of; but the employment of this plant in any way for medical purposes is, in my opinion, highly dangerous. For it is a fact well ascertained, that the leaves even will exercise a deleterious effect upon the mind, if more than four are taken at a time; though the ancients were of opinion that the leaves act as a febrifuge, taken in wine. From the seed, as already[76] stated, an oil is extracted, which, injected into the ears, deranges the intellect. It is a singular thing, but we find remedies mentioned for those who have taken this juice, as though for a poison, while at the same time we find it prescribed as a potion among the various remedies. In this way it is that experiments are multiplied without end, even to forcing the very poisons themselves to act as antidotes.

CHAP. 18. (5.)—LINOZOSTIS, PARTHENION, HERMUPOA, OR MERCURIALIS; TWO VARIETIES OF IT: TWENTY-TWO REMEDIES.

Linozostis[77] or parthenion is a discovery attributed to Mercury: hence it is that among the Greeks it is known as "hermupoa"[78] by many, while among us it is universally known as "mercurialis." There are two varieties of this plant, the male and the female, the last possessing more decided properties than the other, and having a stem a cubit in height, and sometimes branchy at the summit, with leaves somewhat narrower than those of ocimum. The joints of the stem lie close together, and the axils are numerous: the seed hangs downwards, having the joints for its basis. In the

[75] The third kind mentioned above.
[76] In B. xv. c. 7, and B. xxiii. c. 49. This cannot have been a fixed oil.
[77] The Mercuralis annua of Linnæus, male and female; the herb mercury.
[78] "Herb of Hermes."

female plant the seed is very abundant, but in the male[79] it is less so, lies closer to the joints, and is short and wreathed. In the female plant the seed hangs more loosely, and is of a white colour. The leaves of the male plant are swarthy, while those of the female are whiter: the root, which is made no use of, is very diminutive.

Both of these plants grow in cultivated champaign localities. A marvellous property is mentioned as belonging to them: the male plant, they say,[80] ensures the conception of male children, the female plant of females; a result which is ensured by drinking the juice in raisin wine, the moment after conception, or by eating the leaves, boiled with oil and salt, or raw with vinegar. Some persons, again, boil the plant in a new earthen vessel with heliotropium and two or three ears of corn, till it is thoroughly done; and say that the decoction should be taken in drink by the female, and the plant eaten for three days successively, the regimen being commenced the second day of menstruation. This done, on the fourth day she must take a bath, immediately after which the sexual congress must take place.

Hippocrates[81] has lavished marvellous encomiums upon these plants for the maladies of females, while at the present day no physician recognizes their utility for such purpose. It was his practice to employ them for affections of the uterus, in the form of a pessary, in combination with honey, rose-oil, oil of iris, or oil of lilies. He employed them also as an emmenagogue, and for the purpose of bringing away the after-birth; effects which are equally produced, according to him, by taking them in drink, or using them in the form of a fomentation. It was his practice also, to inject the juice of these plants in cases of fetid odours of the ears, and then to wash the ear with old wine. The leaves also were used by him as a cataplasm for the abdomen, defluxions of the eyes, strangury, and affections of the bladder; a decoction too, of the plants is prescribed by him, with frankincense and myrrh.

For the purpose of relaxing[82] the bowels, or in cases of fever,

[79] The male, as Fée suggests, bears no seed at all.

[80] A mere absurdity, of course.

[81] De Nat. Mul. and De Morb. Mul. B. i. and B. ii.

[82] The medicinal properties of the Mercurialis are not by any means energetic, but it is still used, Fée says, as a gentle aperient.

a handful of this plant is boiled down to one half, in two sextarii of water, the decoction being taken with salt and honey: if a pig's foot or a cock is boiled with it, it will be all the more beneficial. Some persons have been of opinion, that as a purgative the two kinds of mercurialis ought to be used together, or else that a decoction should be made of the plant in combination with mallows. These plants act as a detergent upon the chest, and carry off the bilious secretions, but they are apt to be injurious to the stomach. We shall have to speak further of their properties on the appropriate occasions.[83]

CHAP. 19.—THE ACHILLEOS, SIDERITIS, PANACES HERACLEON, MILLEFOLIUM, OR SCOPÆ REGIÆ; SIX VARIETIES OF IT: THREE REMEDIES.

Achilles too, the pupil of Chiron, discovered a plant which heals wounds, and which, as being his discovery, is known as the "achilleos." It was by the aid of this plant, they say, that he cured Telephus. Other authorities, however, assert that he was the first[84] to discover that verdigris[85] is an extremely useful ingredient in plasters; and hence it is that he is sometimes represented in pictures as scraping with his sword the rust from off a spear[86] into the wound of Telephus. Some again, are of opinion that he made use of both remedies.

By some persons this plant is called "panaces heracleon," by others, "sideritis,"[87] and by the people of our country, "millefolium:"[88] the stalk of it, they say, is a cubit in length, branchy, and covered from the bottom with leaves somewhat smaller than those of fennel. Other authorities, however, while admitting that this last plant is good for wounds, affirm that the genuine achilleos has a bluish stem a foot in length,

[83] B. xxvi. cc, 74, 76, 89.

[84] Both stories are equally improbable.

[85] See B. xxxiv. c. 45.

[86] The weapons in early time, it must be remembered, were made of copper or bronze.

[87] The third Sideritis of Dioscorides is thought to be the same with the Heracleon siderion of c. 15 of this Book. Pliny evidently confounds the Achillea and the Sideritis, totally different plants. The Achillea is identified by Fée with the Achillea tomentosa or abrotonifolia of Linnæus. As to the Sideritis, see B. xxvi. c. 12. The *real* Panaces heracleon has been mentioned in c. 12 of this Book.

[88] Or "Thousand leaves," probably identical with the Achillea millefolium of Linnæus, milfoil or yarrow. See B. xxiv. c. 95.

destitute of branches, and elegantly clothed all over with isolated leaves of a round form. Others again, maintain that it has a squared stem, that the heads of it are small and like those of horehound,[89] and that the leaves are similar to those of the quercus—they say too, that this last has the property of uniting the sinews when cut asunder. Another statement is, that the sideritis[90] is a plant that grows on garden walls, and that it emits, when bruised, a fetid smell; that there is also another plant, very similar to it, but with a whiter and more unctuous leaf, a more delicate stem, and mostly found growing in vineyards.

They speak also of another[91] sideritis, with a stem two cubits in length, and diminutive branches of a triangular shape: the leaf, they say, resembles that of fern, and has a long footstalk, the seed being similar to that of beet. All these plants, it is said, are remarkably good for the treatment of wounds. The one with the largest leaf is known among us by the name of "scopæ regiæ,"[92] and is used for the cure of quinzy in swine.

### CHAP. 20.—THE TEUCRION, HEMIONION, OR SPLENION: TWO REMEDIES.

At the same period also, Teucer discovered the teucrion, a plant known to some as the "hemionion."[93] It throws out thin rush-like stems, with diminutive leaves, and grows in rugged, uncultivated spots: the taste of it is rough, and it never blossoms or produces seed. It is used for the cure of affections of the spleen,[94] and it is generally understood that its properties were discovered in the following manner:—The entrails of a victim having been placed upon this plant, it attached itself to the milt, and entirely consumed it;[95] a

[89] "Marrubii."

[90] "Ironwort." The third Sideritis of Dioscorides, above mentioned. See c. 15 of this Book. See also B. xxvi. cc. 12 and 88.

[91] Identified by Desfontaines with the Sanguisorba officinalis of Linnæus.

[92] "Royal broom," identified by many commentators with the Chenopodium scoparia of Linnæus.

[93] Or "mule-plant." It is identified by Fée with the Asplenion ceterach, or Ceterach officinarum of Linnæus, the Ceterach, a fern, and a different plant from the Teucrium of B. xxiv. c. 80, or Germander.

[94] Hence its name, "Asplenium."

[95] "Exinanisse." A fable, of course.

property to which it is indebted for the name of "splenion," given to it by some. It is said too, that swine which have fed upon the root of this plant are found to have no milt.

Some authors give this name also to a ligneous plant,[96] with branches like those of hyssop, and a leaf resembling that of the bean; they say too, that it should be gathered while in blossom, from which we may conclude that they entertain no doubt that it does blossom. That which grows on the mountains of Cilicia and Pisidia is more particularly praised by them.

CHAP. 21.—MELAMPODIUM, HELLEBORE, OR VERATRUM: THREE VARIETIES OF IT. THE WAY IN WHICH IT IS GATHERED, AND HOW THE QUALITY OF IT IS TESTED.

The repute of Melampus, as being highly skilled in the arts of divination, is universally known. This personage has given a name to one species of hellebore, known as the "melampodion." Some persons, however, attribute the discovery of this plant to a shepherd of that name, who remarked that his she-goats were violently purged after browsing upon it, and afterwards cured the daughters of Prœtus of madness, by giving them the milk of these goats. It will be the best plan, therefore, to take this opportunity of treating of the several varieties of hellebore. The two principal kinds are the white[97] and the black;[98] though, according to most authorities, this difference exists in the root only. There are some authors, however, who assure us that the leaves of the black hellebore are similar to those of the plane-tree, only darker, more diminutive, and more jagged at the edges: and who say, that the white hellebore has leaves like those of beet when first shooting, though at the same time of a more swarthy colour, with reddish veins on the under side. The stem, in both kinds, is ferulaceous, a palm[99] in height, and covered with coats like those of the bulbs, the root, too, being fibrous like that of the onion.[1]

[96] The Teucrium lucidum of Linnæus: though, as Fée says, there is little similarity between it and hyssop, or between its leaves and those of the bean. See B. xxiv. c. 80.

[97] Identified by Fée with the Veratrum album and Veratrum nigrum of Linnæus, species between which there is little difference.

[98] Identified by Tournefort with the Helleborus niger of Lamarck. Littré mentions the Helleborus orientalis of Linnæus.

[99] The stem of white hellebore is much longer than this.

[1] This comparison with the onion, Fée says, is altogether inexact.

The black hellebore kills horses, oxen, and swine; hence it is that those animals avoid it, while they eat the white[2] kind. The proper time, thay say, for gathering this last, is harvest. It grows upon Mount Œta in great abundance; and the best of all is that found upon one spot on that mountain, in the vicinity of Pyra. The black hellebore is found growing everywhere, but the best is that of Mount Helicon; which is also equally celebrated for the qualities of its other plants. The white hellebore of Mount Œta is the most highly esteemed, that of Pontus occupying the second place, and the produce of Elea the third; which last, it is generally said, grows in the vineyards there. The fourth rank is held by the white hellebore of Mount Parnassus, though it is often adulterated with that of the neighbouring districts of Ætolia.

Of these kinds it is the black hellebore that is known as the "melampodium:" it is used in fumigations, and for the purpose of purifying houses; cattle, too, are sprinkled with it, a certain form of prayer being repeated. This last plant, too, is gathered with more numerous ceremonies than the other: a circle is first traced around it with a sword, after which, the person about to cut it turns towards the East, and offers up a prayer, entreating permission of the gods to do so. At the same time he observes whether an eagle is in sight—for mostly while the plant is being gathered that bird is near at hand—and if one should chance to fly close at hand, it is looked upon as a presage that he will die within the year. The white hellebore, too, is gathered not without difficulty, as it is very oppressive to the head; more particularly if the precaution has not been used of eating garlic first, and of drinking wine every now and then, care being taken to dig up the plant as speedily as possible.

Some persons call the black hellebore "ectomon,"[3] and others "polyrrhizon:" it purges[4] by stool, while the white hellebore acts as an emetic, and so carries off what might otherwise have given rise to disease. In former days hellebore was regarded with horror, but more recently the use[5] of it has become so familiar, that numbers of studious men are in the

[2] If he would imply that they do this without inconvenience, the statement, Fée says, is incorrect.

[3] "Cut off," and "With many roots."

[4] Hellebore is no longer used, except in veterinary medicine.

[5] Petronius Arbiter says that the philosopher Chrysippus used it.

habit of taking it for the purpose of sharpening the intellectual powers required by their literary investigations. Carneades, for instance, made use of hellebore when about to answer the treatises of Zeno; Drusus[6] too, among us, the most famous of all the tribunes of the people, and whom in particular the public, rising from their seats, greeted with loud applause—to whom also the patricians imputed the Marsic war—is well known to have been cured of epilepsy in the island of Anticyra;[6*] a place at which it is taken with more safety than elsewhere, from the fact of sesamoïdes being combined with it, as already[7] stated. In Italy the name given to it is "veratrum."

These kinds of hellebore, reduced to powder and taken alone, or else in combination with radicula, a plant used, as already mentioned,[8] for washing wool, act as a sternutatory, and are both of them productive of narcotic effects. The thinnest and shortest roots are selected, and among them the lower parts in particular, which have all the appearance of having been cut short;[9] for, as to the upper part, which is the thickest, and bears a resemblance to an onion, it is given to dogs only, as a purgative. The ancients used to select those roots the rind of which was the most fleshy, from an idea that the pith extracted therefrom was of a more refined[10] nature. This substance they covered with wet sponges, and, when it began to swell, used to split it longitudinally with a needle; which done, the filaments were dried in the shade, for future use. At the present day, however, the fibres[11] of the root with the thickest rind are selected, and given to the patient just as they are. The best hellebore is that which has an acrid, burning taste, and when broken, emits a sort of dust. It retains its efficacy, they say, so long as thirty years.

CHAP. 22.—TWENTY-FOUR REMEDIES DERIVED FROM BLACK HELLEBORE. HOW IT SHOULD BE TAKEN.

Black hellebore is administered for the cure of paralysis, insanity, dropsy—provided there is no fever—chronic gout, and diseases of the joints: it has the effect too, of carrying

[6] M. Livius Drusus. See B. xxviii. c. 42, and B. xxxiii. c. 6.

[6*] Anticyra in Phocis was a peninsula, *not* an island.

[7] In B. xxii. c. 64.

[8] In B. xix. c. 18.

[9] Hence the Greek name "ectomon.

[10] "Tenuior."

[11] This is the meaning assigned by Hardouin to the word "ramulos." Holland renders it "small shoots" or "slips," and he is probably right.

off the bilious secretions and morbid humours by stool. It is given also in water as a gentle aperient, the proportion being one drachma at the very utmost, and four oboli for a moderate dose. Some authorities have recomended mixing scammony with it, but salt is looked upon as more safe. If given in any considerable quantity in combination with a sweet substance, it is highly dangerous: used in the form of a fomentation, it disperses films upon the eyes; and hence it is that some medical men have pounded it and used it for an eye-salve. It ripens and acts detergently upon scrofulous sores, suppurations, and indurated tumours, as also upon fistulas, but in this latter case it must be removed at the end of a couple of days. In combination with copper filings[12] and sandarach, it removes warts; and it is applied to the abdominal regions, with barley-meal and wine, in cases of dropsy.

This plant is employed for the cure of pituitous defluxions in cattle and beasts of burden, a slip of it being passed[13] through the ear, and removed at the same hour on the following day. With frankincense also, wax, and pitch, or else pisselæon,[14] it is used for the cure of itch in quadrupeds.

### CHAP. 23.—TWENTY-THREE REMEDIES DERIVED FROM WHITE HELLEBORE.

The best white hellebore is that which acts most speedily as a sternutatory; but it would seem to be a much more formidable[15] plant than the black kind; more particularly if we read in the ancient authors the precautions used by those about to take it, against cold shiverings, suffocation, unnatural drowsiness, continuous hiccup or sneezing, derangements of the stomach, and vomitings, either retarded or prolonged, too sparing or in excess. Indeed, it was generally the practice to administer other substances to promote vomiting, and to carry off the hellebore by the aid of purgatives or clysters, while bleeding even was frequently had recourse to. In addition to all this, however successful the results may prove, the symptoms by which it is attended are really most alarming, by reason of

[12] "Squama æris."

[13] See a similar statement as to Consiligo, in B. xxvi. c. 21.

[14] See B. xv. c. 7, and B. xxiv. c. 11.

[15] Its properties, Fée says, are not more active than those of black hellebore.

the various colours which the matter vomited presents: besides which, after the vomiting has subsided, the physician has to pay the greatest attention to the nature of the alvine evacuations, the due and proper use of the bath, and the general regimen adopted by the patient; all of them inconveniences in themselves, and preceded by the terrors naturally inspired by the character of the drug; for one story is, that it has the property of consuming flesh, if boiled with it.

The great error,[16] however, on the part of the ancients was, that in consequence of these fears, they used to give it too sparingly, the fact being, that the larger the dose, the more speedily it passes through the body. Themison used to give no more than two drachmæ, but at a later period as much as four drachmæ was administered; in conformity with the celebrated eulogium passed upon it by Herophilus,[17] who was in the habit of comparing hellebore to a valiant general, and saying, that after it has set in motion all within, it is the first to sally forth and show the way. In addition to these particulars, there has been a singular discovery made: the hellebore which, as we have already stated, has been cut with a small pair of scissors,[18] is passed through a sieve, upon which the pith makes its way through, while the outer coat remains behind. The latter acts as a purgative, while the former is used for the purpose of arresting vomiting when that evacuation is in excess.

### CHAP. 24.—EIGHTY-EIGHT OBSERVATIONS UPON THE TWO KINDS OF HELLEBORE.

In order to secure a beneficial result, due precautions must be taken not to administer hellebore in cloudy weather; for if given at such a time, it is sure to be productive of excruciating agonies. Indeed there is no doubt that summer is a better time for giving it than winter: the body too, by an abstinence from wine, must be prepared for it seven days previously, emetics being taken on the fourth and third days before, and

[16] Fée remarks, that they showed their wisdom in this.

[17] Herophilus, it must be remembered, lived a considerable time before Themison.

[18] "Forficulis." He probably refers to c. 21, where, however, he has mentioned only a needle—"acus." It is possibly a *lapsus memoriæ* on his part.

the patient going without his evening meal the previous day. White hellebore, too, is administered in a sweet[19] medium, though lentils or pottage are found to be the best for the purpose. There has been a plan also, lately discovered, of splitting a radish, and inserting the hellebore in it, after which the sections are pressed together; the object being that the strength of the hellebore may be incorporated with the radish, and modified thereby.

At the end of about four hours it generally begins to be brought up again; and within seven it has operated to the full extent. Administered in this manner, it is good for epilepsy, as already[20] stated, vertigo, melancholy, insanity, delirium, white elephantiasis, leprosy, tetanus, palsy, gout, dropsy, incipient tympanitis, stomachic affections, cynic spasms,[21] sciatica, quartan fevers which defy all other treatment, chronic coughs, flatulency, and recurrent gripings in the bowels.

### CHAP. 25.—TO WHAT PERSONS HELLEBORE SHOULD NEVER BE ADMINISTERED.

It is universally recommended not to give hellebore to aged people or children, to persons of a soft and effeminate habit of body or mind, or of a delicate or tender constitution. It is given less frequently too to females than to males; and persons of a timorous disposition are recommended not to take it: the same also, in cases where the viscera are ulcerated or tumefied, and more particularly when the patient is afflicted with spitting of blood, or with maladies of the side or fauces. Hellebore is applied, too, externally, with salted axle-grease, to morbid eruptions of the body and suppurations of long standing: mixed with polenta, it destroys rats and mice. The people of Gaul, when hunting, tip their arrows with hellebore, taking care to cut away the parts about the wound in the animal so slain: the flesh, they say, is all the more tender for it. Flies are destroyed with white hellebore, bruised and sprinkled about a place with milk: phthiriasis is also cured by the use of this mixture.

[19] This he has stated to be attended with danger, in the case of black hellebore, should the dose be too strong.

[20] In c. 21 of this Book.

[21] Twitchings of the mouth, which cause the patient to show his teeth, like a dog.

CHAP. 26. (6.)—THE MITHRIDATIA.

Crateuas ascribes the discovery of one plant to Mithridates himself, the name of which is "mithridatia."[22] Near the root it has two leaves resembling those of the acanthus, between which it puts forth a stem supporting a flower at the extremity, like a rose.

CHAP. 27.—THE SCORDOTIS OR SCORDION: FOUR REMEDIES.

Lenæus attributes to Mithridates the discovery of another plant, the scordotis[23] or scordion, which has been described, he tells us, by the hand even of that prince. This plant, he says, is a cubit in height, and has a square stem, branchy, covered with downy leaves, and resembling the quercus[24] in appearance: it is found growing in Pontus, in rich, humid soils, and has a bitter taste.

There is another[25] variety also of this plant, with a larger leaf, and resembling wild mint in appearance. They are both of them used for numerous purposes, both individually and in combination with other ingredients, as antidotes.

CHAP. 28.—THE POLEMONIA, PHILETÆRIA, OR CHILIODYNAMUS: SIX REMEDIES.

The polemonia[26] is known as the "philetæria" by some, in consequence of the contest which has arisen between certain kings for the honour of its discovery. The people of Cappadocia also give it the name of "chiliodynamus."[27] The root of it is substantial, and it has slender branches, with umbels

[22] Cæsalpinus identifies it with the Erythronium dens canis of Linnæus, and Commerson and Schreiber with the Dorstenia tambourissa of Sonnerat. Fée is probably right in considering its synonym as still unknown.

[23] Hardouin identifies it with the Stachys Germanica, Linnæus and Sprengel with the Nepeta scordotis of Linnæus, and Fée with the Stachys Palæstina.

[24] Fée remarks, that none of the plants mentioned in the last Note bear any resemblance to the "quercus," or oak.

[25] Probably the Teucrium scorodonia of Linnæus, Fée says; though, as he remarks, the description might apply to many of the Labiatæ.

[26] Its names were derived from Polemon, a king of Pontus, and Philetærus, a king of Cappadocia. It is generally identified with the Polemonium cæruleum of Linnæus, Greek valerian, or Jacob's ladder. M. Fraas suggests that it may be the Hypericum Olympicum of Linnæus, with which he also identifies the Panaces chironion.

[27] "With a thousand virtues."

hanging from the extremities, and a black seed. In other respects, it bears a resemblance to rue, and is found growing in mountainous localities.

### CHAP. 29.—THE EUPATORIA: ONE REMEDY.

The eupatoria[28] also is a plant under royal patronage. The stem of it is ligneous, hairy, and swarthy, and a cubit or more in length. The leaves, arranged at regular intervals, resemble those of cinquefoil or hemp; they have five indentations at the edge, and are swarthy like the stem, and downy. The root is never used. The seed, taken in wine, is a sovereign remedy for dysentery.

### CHAP. 30.—CENTAURION OR CHIRONION: TWENTY REMEDIES.

Centaury,[29] it is said, effected a cure for Chiron, on the occasion when, while handling the arms of Hercules, his guest, he let one of the arrows fall upon his foot: hence it is that by some it is called "chironion." The leaves of it are large and oblong, serrated at the edge, and growing in thick tufts from the root upwards. The stems, some three cubits in height and jointed, bear heads resembling those of the poppy. The root is large and spreading, of a reddish colour, tender and brittle, a couple of cubits in length, and full of a bitter juice, somewhat inclining to sweet.

This plant grows in rich soils upon declivities; the best in quality being that of Arcadia, Elis, Messenia, Mount Pholoë, and Mount Lycæus: it grows also upon the Alps, and in numerous other localities, and in Lycia they prepare a lycium[30] from it. So remarkable are its properties for closing wounds, that pieces of meat even, it is said, are soldered together, when boiled with it. The root is the only part in use, being administered in doses of two drachmæ in the several cases hereafter[31] men-

[28] So called probably from a king Eupator. Sprengel and Desfontaines identify it with the Agrimonia eupatorium, but Fée prefers the Eupatorium cannabinum of Linnæus, relying upon the description given by Dioscorides. B. iv. c. 41.

[29] Fée considers this to be the same with the Panaces centaurion or Pharnaceon of c. 14 of this Book, the greater Centaury. Littré also names the Centaurea centaureum of Linnæus.

[30] See B. xii. c. 15. B. xxiii. cc. 58, 60, and B. xxiv. c. 77, for a preparation with a similar name, but, as Fée says, of an entirely different character.

[31] In B. xxvi. cc. 15, 19, 34, 55, 66, 76, 85, and 91.

tioned. If, however, the patient is suffering from fever, it should be bruised and taken in water, wine being used in other cases. A decoction of the root is equally useful for all the same purposes.

CHAP. 31.—THE CENTAURION LEPTON, OR LIBADION, KNOWN ALSO AS FEL TERRÆ: TWENTY-TWO REMEDIES.

There is another centaury also, with diminutive leaves, known by the additional name of "lepton."[32] By some persons it is called "libadion,"[33] from the circumstance that it grows upon the borders of fountains. It is similar to origanum in appearance, except that the leaves are narrower and longer. The stem is angular, branchy, and a palm in height; the flower is like that of the lychnis,[34] and the root is thin, and never used. It is in the juice that its medicinal properties are centred: it being gathered in the autumn, and the juice extracted from the leaves. Some persons cut up the stalks, and steep them for some eighteen days in water, and then extract the juice.

In Italy this kind of centaury is known as "gall[35] of the earth," from its extreme bitterness. The Gauls give it the name of "exacum;"[36] from the circumstance that, taken in drink, it purges off all noxious substances by alvine evacuation.

CHAP. 32.—THE CENTAURIS TRIORCHIS: TWO REMEDIES.

There is a third kind of centaury also, known as the "centauris triorchis."[37] It is but rarely that a person cuts it without wounding himself. The juice emitted is just the colour of blood.[38] Theophrastus relates that this plant is under

[32] Or "small" centaury. Probably the Chironia centaureum of Smith, *Flor. Brit.*, our Felwort. Littré names the Erythræa centaureum of Persoon.

[33] From λίβαδες, "flowing streams."

[34] See B. xxi. cc. 10, 39, and 98, also c. 80 of this Book.

[35] "Fel terræ."

[36] A word of Celtic origin, most probably, and not from the Greek, as Pintianus supposes.

[37] Theophrastus, as stated by Pliny, in B. ix. c. 9, says that centaury is protected by the "triorchis" (see B. x. cc. 95, 96), and Pliny in translating the passage has made a mistake as to a third kind. Fée is probably right in his conjecture that the Centaurea centaureum is meant; though Brotier and Desfontaines look upon this as being a distinct plant, and identify it with the Rumex sanguineus of Linnæus.

[38] The root of the greater centaury, Fée remarks, is of a deep red within.

the protection of the triorchis, a kind of hawk, which attacks those who gather it; a circumstance to which it owes its name. Ignorant[39] persons are in the habit of confounding all these characteristics, and attributing them to the centaury first named.

CHAP. 33. (7).—CLYMENUS: TWO REMEDIES.

Clymenus is a plant so called, after a certain king.[40] It has leaves like those of ivy, numerous branches, and a hollow, jointed stem. The smell of it is powerful, and the seed like that of ivy: it grows in wild and mountainous localities. We shall have to state hereafter, of what maladies it is curative, taken in drink, but it is as well to take the present opportunity of remarking that, while effecting a cure, in the male sex it neutralizes the generative powers.

The Greeks speak[41] of this plant as being similar to the plantago in appearance, with a square stem, and a seed in capsules, interlaced like the arms of the polypus. The juice of this plant, too, is used, being possessed of refreshing properties in a very high degree.

CHAP. 34.—GENTIAN: THIRTEEN REMEDIES.

Gentian[42] was first discovered by Gentius, king of Illyria. It is a plant to be found everywhere,[43] but that of Illyria is the finest. It has a leaf like that of the ash,[44] but equal in size to a lettuce-leaf: the stem is tender, about the thickness of the thumb, hollow and empty, and covered with leaves at regular intervals. This stem is sometimes three cubits in length, and the root is flexible, swarthy,[45] and inodorous. It is found in the greatest abundance in humid localities at the foot of the Alps. The root and juice are the parts of it that are used: the root is possessed of certain warming pro-

[39] Pliny himself is one of the "imperiti" here.

[40] Son of Cæneus, and king of Arcadia. The plant is identified with the Lonicera periclymenum of Linnæus, our Woodbine or Honeysuckle. Sibthorp identifies the Clymenum of Dioscorides with the Convolvulus sepium of Linnæus, and Sprengel with the Lathyrus clymenum of Linnæus.

[41] Possibly the Clymenum of Dioscorides, mentioned in the preceding Note. Littré names the Calendula arvensis, the Field marigold.

[42] The Gentiana lutea of Linnæus.

[43] This, Fée remarks, is not the fact.

[44] This comparison is inexact.

[45] It is *not* swarthy.

perties, but it should never be taken by women in a state of pregnancy.

### CHAP. 35.—THE LYSIMACHIA: EIGHT REMEDIES.

King Lysimachus[46] first discovered the plant which from him has received the name of lysimachia, and the merits of which have been so highly extolled by Erasistratus. This plant has green leaves resembling those of the willow, and a purple[47] blossom: it has all the appearance of a shrub, the branches are erect, and it has a pungent smell. It is found growing in watery soils. The properties of it are so extremely powerful, that if placed upon the yoke when beasts of burden are restive, it will be sure to overcome all stubbornness on their part.[48]

### CHAP. 36.—ARTEMISIA, PARTHENIS, BOTRYS, OR AMBROSIA: FIVE REMEDIES.

Women too have even affected an ambition to give their name to plants: thus, for instance, Artemisia, the wife of King Mausolus, adopted the plant, which before was known by the name of "parthenis." There are some persons, however, who are of opinion that it received this surname from the goddess Artemis Ilithyia,[49] from the fact of its being used for the cure of female complaints more particularly. It is a plant with numerous branches, like those of wormwood, but the leaves of it are larger and substantial.

There are two varieties of it; one has broader[50] leaves than the other,[51] which last is of a slender form, with a more diminutive leaf, and grows nowhere but in maritime districts.

[46] A king of Thrace, contemporary with Alexander the Great. Sprengel and Desfontaines identify this plant with the Lythrum salicaria of Linnæus, the purple Willow-herb. Fée, on the authority of Dioscorides, identifies it with the Lysimachia vulgaris of Linnæus, the yellow Willow-plant. Littré gives the Lysimachia atro-purpurea of Linnæus.

[47] Pliny has probably mistranslated the Greek πυῤῥόν here, "reddish yellow."

[48] An absurdity, of course.

[49] Artemis or Diana, the guardian of pregnant women.

[50] Probably the Artemisia chamæmelifolia, Camomile-leaved mugwort. The A. arborescens, the Tree-wormwood is named by Littré.

[51] Either the Artemisia Pontica of Linnæus, Little wormwood, or Roman wormwood, or else A. campestris of Linnæus, Field southern-wood.

Some persons again, give this name to a plant[52] which grows more inland, with a single stem, extremely diminutive leaves, and numerous blossoms which open at the ripening of the grape, and the odour of which is far from unpleasant. In addition to this name, this last plant is known as "botrys" to some persons, and "ambrosia" to others:[53] it grows in Cappadocia.

CHAP. 37.—NYMPHÆA, HERACLEON, RHOPALON, OR MADON; TWO VARIETIES OF IT: FOUR REMEDIES.

The plant called "nymphæa," owes its name, they say, to a Nymph who died of jealousy conceived on account of Hercules, for which reason it is also known as "heracleon" by some. By other persons, again, it is called "rhopalon," from the resemblance of its root to a club.[54] * * * * and hence it is that those who take it in drink become impotent for some twelve days, and incapacitated for procreation. That of the first quality is found in Orchomenia and at Marathon: the people of Bœotia call it "madon," and use the seed for food. It grows in spots covered with water; the leaves[55] of it are large, and float upon the surface, while others are to be seen springing from the roots below. The flower is very similar to a lily in appearance, and after the plant has shed its blossom, the place of the flower is occupied by a head like that of the poppy. The stem is slender, and the plant is usually cut in autumn. The root, of a swarthy hue, is dried in the sun; garlic[56] manifests a peculiar antipathy to it.

There is another[57] nymphæa also, which grows in the river Peneus, in Thessaly: the root of it is white, and the head yellow, about the size of a rose.

CHAP. 38.—TWO VARIETIES OF EUPHORBIA: FOUR REMEDIES. THE CHAMELÆA.

In the time, too, of our fathers, King Juba discovered[58] a

[52] Identified with the Artemisia camphorata of Linnæus, Camphorated mugwort.

[53] Quite a different plant. See B. xxvii. c. 11.

[54] Judging from the text of Dioscorides, a passage has been probably lost here, to the effect that "it is taken in drink by persons troubled with lascivious dreams."

[55] Identified with the Nymphæa alba of Linnæus, the White-flowered nymphæa.

[56] "Adversatur ei allium." A corrupt reading, in all probability.

[57] The Nuphar lutea of Sibthorp; the Yellow-flowered nymphæa, or Nenuphar.

[58] See B. v. c. i.

plant, to which he gave the name of "euphorbia," in honour of his physician, Euphorbus, the brother of the same Musa, whom we have mentioned[59] as having saved the life of the late Emperor Augustus. It was these brothers who introduced the practice of douching the body with large quantities of cold water, immediately after the bath, for the purpose of bracing the system: whereas in former times, as we find stated in the works of Homer[60] even, it was the practice to wash the body with warm water only. With reference to euphorbia,[61] there is a treatise still in existence, written upon it by King Juba, in which he highly extols its merits: he discovered it growing upon Mount Atlas, and describes it as resembling a thyrsus in appearance, and bearing leaves like those of the acanthus.[62]

The properties of this plant are so remarkably powerful,[63] that the persons engaged in collecting the juices of it are obliged to stand at a considerable distance. The incisions are made with a long pole shod with iron, the juice flowing into receivers of kid-leather placed beneath. The juice has all the appearance of milk, as it exudes, but when it has coagulated and dried, it assumes the form and consistency of frankincense. The persons engaged in collecting it, find their sight improved[64] thereby. This juice is an excellent remedy for the stings of serpents: in whatever part of the body the wound may have been inflicted, the practice is to make an incision in the crown of the head, and there introduce the medicament. The Gætuli who collect it, are in the habit of adulterating it with warm milk;[65] a fraud, however, easily to be detected by the agency of fire, that which is not genuine emitting a most disgusting smell.

Much inferior to this is the juice extracted, in Gaul,[66] from the chamelæa,[67] a plant which bears the grain of Cnidos. When broken asunder, it resembles hammoniacum[68] in appearance; and however slightly tasted, it leaves a burning sensation in

[59] In B. xix. c. 38.
[60] Il. xii. 444.
[61] The Euphorbia officinarum of Linnæus, Officinal spurge.
[62] An incorrect statement, as Fée remarks.
[63] Its odour, Fée says, is not so strong as Pliny would have us believe.
[64] On the contrary, Fée observes, it would be not unlikely to produce ophthalmia of the most obstinate kind.
[65] This Fée considers to be almost impracticable.
[66] Cisalpine Gaul.
[67] See B. xiii. c. 35.
[68] See B. xii. c. 49, B. xxiv. c. 14, and B. xxxi. c. 39.

the mouth, which lasts a considerable time, and increases every now and then, until, in fact, it has quite parched the fauces.

CHAP. 39. (8.)—TWO VARIETIES OF THE PLANTAGO: FORTY-SIX REMEDIES.

The physician Themiso, too, has conferred some celebrity upon the plantago, otherwise a very common plant; indeed he has written a treatise upon it, as though he had been the first to discover it. There are two varieties; one, more diminutive[69] than the other, has a narrower and more swarthy leaf, strongly resembling a sheep's tongue in appearance: the stem of it is angular and bends downwards, and it is generally found growing in meadow lands. The larger[70] kind has leaves enclosed with ribs at the sides, to all appearance, from the fact of which being seven[71] in number, the plant has been called "heptapleuron"[72] by some. The stem of it is a cubit in height, and strongly resembles that of the turnip. That which is grown in a moist soil is considered much the most efficacious: it is possessed of marvellous virtues as a desiccative and as an astringent, and has all the effect of a cautery. There is nothing that so effectually arrests the fluxes known by the Greeks as "rheumatismi."

CHAP. 40.—BUGLOSSOS: THREE REMEDIES.

To an account of the plantago may be annexed that of the buglossos, the leaf of which resembles an ox tongue.[73] The main peculiarity of this plant is, that if put into wine, it promotes[74] mirth and hilarity, whence it has obtained the additional name of "euphrosynum."[75]

[69] The Plantago lagopus of Linnæus, according to Sibthorp; but Sprengel identifies it with the Plantago lanceolata of Linnæus, or else the P. maritima.

[70] The Plantago altissima or major of modern botany.

[71] *I. e.* the ribs, nerves, or sinews of the leaf.

[72] "Seven-sided."

[73] Whence its name, from the Greek. Sprengel and Desfontaines identify it with the Borrago officinalis of Linnæus, our Borage. Littré gives the Anchusa Italica.

[74] Though Pliny's assertion is supported by the authority of the School of Salerno, Fée treats it as entirely unfounded. Leaves of borage still form an ingredient in the beverages known as Copas and Cider-cup at Cambridge. See this usage, and the identity of the Buglossos discussed at some length by Beckmann, Hist. Inv. Vol. ii. p. 340, *Bohn's Ed.*

[75] "Promoting cheerfulness."

CHAP. 41.—CYNOGLOSSOS: THREE REMEDIES.

To this plant we may also annex an account of the cynoglossos,[76] the leaf of which resembles a dog's tongue, and which produces so pleasing an effect[77] in ornamental gardening. The root, it is said, of the kind which bears three[78] stems surmounted with seed, is very useful, taken in water, for tertian, and of that with four stems, for quartan, fevers.

There is another plant[79] very similar to it, which bears diminutive burrs resembling those of the lappa: [79*] the root of it, taken in water, is curative of wounds inflicted by frogs[80] or serpents.

CHAP. 42.—THE BUPHTHALMOS OR CACHLA: ONE REMEDY.

There is the buphthalmos[81] also, so called from its resemblance to an ox's eye, and with a leaf like that of fennel. It grows in the vicinity of towns, and is a branchy plant, with numerous stems, which are boiled and eaten. Some persons give it the name of "cachla." In combination with wax, it disperses scirrhi.[82]

CHAP. 43.—PLANTS WHICH HAVE BEEN DISCOVERED BY CERTAIN NATIONS. THE SCYTHICE: ONE REMEDY.

Entire nations, too, have been the discoverers of certain plants. The Scythæ were the first to discover the plant known as "scythice,"[83] which grows in the vicinity of the Palus[83*]

[76] "Dog's tongue." The Cynoglossum officinale of Linnæus, Hounds' tongue, or Venus' navel-wort; or else the C. pictum of Aiton.

[77] Fée is at a loss to know how it can have been employed in topiary work, or ornamental gardening.

[78] This statement is made by Dioscorides with reference to Arnoglossos, Lamb's tongue, or Plantago. See c. 39, above.

[79] Identified with the Myosotis lappula of Linnæus, Prickly-seeded scorpion-grass. [79*] See B. xxi. c. 64.

[80] "Ranis." Under this name he probably includes toads.

[81] Sprengel and Desfontaines identify it with the Anthemis valentina of Linnæus, the Purple-stalked camomile; but Fée agrees with Sibthorp in considering it to be the Chrysanthemum segetum of Linnæus, the Corn marigold, the former not being, apparently, a native of Greece. Littré gives the Chrysanthemum coronarium of Linnæus, the Garland chrysanthemum.

[82] "Steatomata." Tumours of a fatty nature.

[83] Generally agreed to be identical with the Glycyrrhiza of B. xxii. c. 2, our Liquorice. Fée says that the G. asperrima grows in great abundance on the banks of the river Volga. [83*] See B. xxvii. c. 1.

Mæotis. Among its other properties, this plant is remarkably sweet, and extremely useful for the affection known as "asthma." It is also possessed of another great recommendation—so long as a person keeps it in his mouth, he will never[84] experience hunger or thirst.

CHAP. 44.—THE HIPPACE: THREE REMEDIES.

The hippace,[85] another plant that grows in Scythia, is possessed of similar properties: it owes[86] its name to the circumstance that it produces the like effect upon horses. By the aid of these two plants, the Scythæ, they say, are enabled to endure hunger and thirst, so long as twelve days even.

CHAP. 45.—THE ISCHÆMON: TWO REMEDIES.

The Thracians were the first to discover the ischæmon,[87] which, it is said, has the property of stanching the flow of blood, not only when a vein has been opened, but when it has been cut asunder even. This is a creeping plant; it is like millet in appearance, and the leaves of it are rough and lanuginous. It is used as a plug[88] for the nostrils. The kind that grows in Italy, attached to the body as an amulet, has the property of arresting hæmorrhage.

CHAP. 46.—THE CESTROS, PSYCHOTROPHON, VETTONICA, OR SERRATULA: FORTY-EIGHT REMEDIES.

The Vettones, a people of Spain, were the original discoverers of the plant known as the "vettonica"[89] in Gaul, the "serratula"[90] in Italy, and the "cestros" or "psychotrophon"[91] in

[84] Liquorice certainly palls the appetite, but it is very apt to create thirst.

[85] In copying from the Greek, Pliny has mistaken "hippace," a cheese made from mare's milk, for a plant! It is very likely, however, that it would tend, like any other cheese, to appease hunger, though, probably, not thirst.

[86] He has probably invented this reason himself, as it is hardly probable that the Scythians would feed their horses with cheese, even though made from mare's milk.

[87] Sprengel identifies it with the Andropogon ischæmon of Linnæus, the Woolly andropogon. Fée expresses his doubts as to its identification. It derives its name "ischæmon," from its property of stanching blood.

[88] To arrest epistaxis or bleeding at the nose.

[89] The Betonica alopecuros of Linnæus, the Fox-tail betony.

[90] The "little saw."

[91] "Nurtured by breezes." M. Fraäs thinks that the Cestros of the

Greece. This is a plant more highly esteemed than any other: it puts forth an angular stem two cubits in height, and throws out leaves from the root, with serrated edges, and closely resembling those of lapathum.[92] The seed of it is purple: the leaves are dried and powdered, and used for numerous purposes. There is a wine also prepared from it, and a vinegar, remarkably beneficial to the stomach and the eyesight. Indeed, this plant enjoys so extraordinary a reputation, that it is a common belief even that the house which contains it is insured against misfortunes of every kind.

### CHAP. 47.—THE CANTABRICA: TWO REMEDIES.

In Spain, too, is found the cantabrica,[93] which was first discovered by the nation of the Cantabri in the time of the late Emperor Augustus. It grows everywhere in those parts, having a stem like that of the bulrush, a foot in height, and bearing small oblong flowers, like a calathus[94] in shape, and enclosing an extremely diminutive seed.

Nor indeed, in other respects, have the people of Spain been wanting in their researches into the nature of plants; for at the present day even it is the custom in that country, at their more jovial entertainments, to use a drink called the hundred-plant drink, combined with a proportion of honied wine; it being their belief, that the wine is rendered more wholesome and agreeable by the admixture of these plants. It still remains unknown to us, what these different plants are, or in what number exactly they are used: as to this last question, however, we may form some conclusion from the name that is given to the beverage.

### CHAP. 48.—CONSILIGO: ONE REMEDY.

Our own age, too, can remember the fact of a plant being discovered in the country of the Marsi. It is found growing also in the neighbourhood of the village of Nervesia, in the territory of the Æquicoli, and is known by the name of

Greeks is a different plant from the Vettonica of the Romans, and identifies it with the Sideritis Syriaca.

[92] See B. xx. c. 85.

[93] Pliny is the only author that mentions the Cantabrica, and his account, Fée thinks, is too meagre to enable us satisfactorily to identify it with the Convolvulus cantabrica of Linnæus.

[94] A conical work-basket or cup. See B. xxi. c. 11.

"consiligo."[95] It is very useful, as we shall have occasion to mention[96] in the appropriate place, in cases of phthisis where recovery is considered more than doubtful.

### CHAP. 49.—THE IBERIS: SEVEN REMEDIES.

It is but very lately, too, that Servilius Democrates, one of our most eminent physicians, first called attention to a plant to which he gave the name of iberis,[97] a fanciful appellation[98] only, bestowed by him upon this discovery of his in the verses by him devoted[99] to it. This plant is found mostly growing in the vicinity of ancient monuments, old walls, and overgrown footpaths: it is an evergreen, and its leaves are like those of nasturtium, with a stem a cubit in height, and a seed so diminutive as to be hardly perceptible; the root, too, has just the smell of nasturtium. Its properties are more strongly developed in summer, and it is only used fresh-gathered: there is considerable difficulty in pounding it.

Mixed with a small proportion of axle-grease, it is extremely useful for sciatica and all diseases of the joints; the application being kept on some four hours at the utmost, when used by the male sex, and about half that time in the case of females. Immediately after its removal, the patient must take a warm bath, and then anoint the body all over with oil and wine—the same operation being repeated every twenty days, so long as there are any symptoms of pain remaining. A similar method is adopted for the cure of all internal defluxions; it

[95] Sprengel and other commentators identify it with the Pulmonaria officinalis of Linnæus, Lungwort or Pulmonary. Others, again, consider it to be the Veratrum album of Linnæus, or White hellebore. Fée considers that its synonym has not hitherto been discovered. Holland calls it Bear-foot.

[96] B. xxvi. c. 21.

[97] Fée identifies it with the Lepidium graminifolium of Linnæus, Grass-leaved pepperwort; Desfontaines with the L. Iberis of Linnæus, Bushy pepperwort. Littré gives as its synonym the Iberis amara of Linnæus, the White candy-tuft.

[98] "Fictum nomen." Salmasius thinks that by these words, Pliny means that Democrates invented the name of a friend of his as being the discoverer of this plant, which in reality was discovered by himself. It would seem to mean, however, that the name "iberis" was only a fanciful title, derived from the country where it was found, and given to it for want of acquaintance with its real name.

[99] Still preserved in Galen, B. x. c. 2.

is never applied, however, so long as the inflammation is at its height, but only when it has somewhat abated.

### CHAP. 50.—PLANTS WHICH HAVE BEEN DISCOVERED BY CERTAIN ANIMALS. CHELIDONIA: SIX REMEDIES.

The brute animals also have been the discoverers of certain plants: among them, we will name chelidonia first of all. It is by the aid of this plant that the swallow restores the sight of the young birds in the nest, and even, as some persons will have it, when the eyes have been plucked out. There are two varieties of this plant; the larger[1] kind has a branchy stem, and a leaf somewhat similar to that of the wild parsnip,[2] but larger. The plant itself is some two cubits in height, and of a whitish colour, that of the flower being yellow. The smaller[3] kind has leaves like those of ivy, only rounder and not so white. The juice of it is pungent, and resembles saffron in colour, and the seed is similar to that of the poppy.

These plants blossom,[4] both of them, at the arrival of the swallow, and wither at the time of its departure. The juice is extracted while they are in flower, and is boiled gently in a copper vessel on hot ashes, with Attic honey, being esteemed a sovereign remedy for films upon the eyes. This juice is employed also, unmixed with any other substance, for the eyesalves,[5] which from it take their name of "chelidonia."

### CHAP. 51.—THE DOG-PLANT: ONE REMEDY.

Dogs, too, are in the habit of seeking a certain plant,[6] as a stimulant to the appetite; but although they eat it in our presence, it has never yet been discovered what it is, it being quite impossible to recognize it when seen half-chewed. There has also been remarked another bit of spitefulness in this animal, though in a much greater degree, in reference to

[1] The Chelidonium majus of Linnæus, the Greater celandine or swallow-wort.

[2] "Pastinaca erratica." See c. 64 of this Book.

[3] Identified with the Ranunculus ficaria of Linnæus, the Pilewort, or Lesser celandine.

[4] The same is the case, Fée remarks, with numbers of other plants.

[5] "Collyriis."

[6] The Dactylos of B. xxiv. c. 119, is supposed to be the plant alluded to. The word "canariam" is found here in former editions, but Sillig omits it. Indeed Pliny seems to say that it is quite unknown to him.

another plant. When stung by a serpent, it cures itself, they say, by eating a certain herb, taking care, however, never to gather it in presence of man.

### CHAP. 52.—THE ELAPHOBOSCON.

The hind, with a much greater degree of frankness, has discovered to us the elaphoboscon, a plant of which we have already[7] spoken, and which is also called "helxine,"[8] from the assistance it affords those animals in yeaning.

### CHAP. 53.—DICTAMNON: EIGHT REMEDIES. PSEUDODICTAMNON OR CHONDRIS. IN WHAT PLACES THE MOST POWERFUL PLANTS ARE FOUND. HOW THAT MILK IS DRUNK IN ARCADIA FOR THE BENEFICIAL EFFECTS OF THE PLANTS UPON WHICH THE CATTLE FEED.

It is the hind, too, that, as already[9] stated, first made us acquainted with dictamnon,[10] or dittany; for when wounded, it eats some of this plant, and the weapon immediately falls from the body. This plant grows nowhere[11] but in Crete. The branches of it are remarkably thin; it resembles pennyroyal in appearance, and is hot and acrid to the taste. The leaves are the only part employed, it being destitute of[12] blossom, seed, and stem: the root is thin, and never used. In Crete even, it is found growing only in a very limited locality, and is sought by goats with singular avidity.

In place of it, the pseudodictamnum[13] is employed, a plant that is found growing in many countries. In leaf it is similar to the other, but the branches are more diminutive: by some persons it is known as "chondris." Its properties not being so strongly developed, the difference is immediately recognized: for an infusion of the very smallest piece of the real dittany,

[7] In B. xxii. c. 37.

[8] From the Greek ἕλκω, "to draw."

[9] In B. viii. c. 41.

[10] The Origanum dictamnus of Linnæus, Dittany of Candia.

[11] This is an error: it grows, and doubtless did in Pliny's time, in numerous other places; but that of Mount Ida in Crete was held in the highest esteem.

[12] It has all three, in fact; as Fée says, it is evident that Pliny never saw it. Its medicinal properties are no longer held in any esteem.

[13] "False-dittany." It is generally identified with the Marrubium pseudodictamnus of Linnæus, the Shrubby white horehound; though perhaps on insufficient grounds.

is sufficient to burn the mouth. The persons who gather it are in the habit of enclosing it in a stem of fennel-giant or in a reed, which they close at the ends that the virtues of it may not escape. Some persons say, that both plants grow indiscriminately in numerous localities, the inferior sort being the produce of rich soils, and the genuine dittany being found nowhere but in rugged, uncultivated spots.

There is, again, a third[14] plant called "dictamnum," which, however, has neither the appearance nor the properties of the other plant so called; the leaves of it are like those of sisymbrium,[15] but the branches are larger.

There has long been this impression with reference to Crete, that whatever plant grows there is infinitely superior in its properties to a similar plant the produce of any other country; the second rank being given to the produce of Mount Parnassus. In addition to this, it is generally asserted that simples of excellent quality are found upon Mount Pelion in Thessaly, Mount Teleuthrius in Eubœa, and throughout the whole of Arcadia and Laconia. Indeed, the Arcadians, they say, are in the habit of using, not the simples themselves, but milk, in the spring season more particularly; a period at which the field plants are swollen with juice, and the milk is medicated by their agency. It is cows' milk in especial that they use for this purpose, those animals being in the habit of feeding upon nearly every kind of plant. The potent properties of plants are manifested by their action upon four-footed animals in two very remarkable instances: in the vicinity of Abdera and the tract known as the Boundary[16] of Diomedes, the horses, after pasturing, become inflamed with frantic fury; the same is the case, too, with the male asses, in the neighbourhood of Potniæ.

CHAP. 54.—THE ARISTOLOCHIA, CLEMATITIS, CRETICA, PLISTOLOCHIA, LOCHIA POLYRRHIZOS, OR APPLE OF THE EARTH: TWENTY-TWO REMEDIES.

In the number of the most celebrated plants is the aristo-

[14] Fée is inclined, with Sprengel, to identify it with the Origanum Creticum of Linnæus. Other commentators have suggested the Origanum Tournefortii, the Thymus mastichina of Linnæus, and the Marrubium acetabulosum of Linnæus.

[15] See B. xx. c. 91.

[16] "Limes Diomedis."

lochia, which would appear to have derived its name from females in a state of pregnancy, as being ἀρίστη λοχούσαις.[17] Among us, however, it is known as the "malum terræ," or apple of the earth,[18] four different varieties of it being distinguished. One of these has a root covered with tubercles of a rounded[19] shape, and leaves of a mixed appearance, between those of the mallow and the ivy, only softer and more swarthy. The second[20] kind is the male plant, with an elongated root some four fingers in length, and the thickness of a walking-stick. A third[21] variety is extremely thin and long, similar to a young vine in appearance: it has the most strongly-marked properties of them all, and is known by the additional names of "clematitis," and "cretica." All these plants are the colour of boxwood, have a slender stem, and bear a purple flower and small berries like those of the caper: the root is the only part that is possessed of any virtues.

There is also a fourth[22] kind, the name given to which is "plistolochia;" it is more slender than the one last mentioned, has a root thickly covered with filaments, and is about as thick as a good-sized bulrush: another name given to it is "polyrrhizos." The smell of all these plants is medicinal, but that of the one with an oblong root and a very slender stem, is the most agreeable: this last, in fact, which has a fleshy outer coat, is well adapted as an ingredient for nardine unguents even. They grow in rich champaign soils, and the best time for gathering them is harvest; after the earth is scraped from off them, they are put by for keeping.

The aristolochia that is the most esteemed, however, is that

[17] "Most excellent for pregnancy." [18] See B. xxvi. c. 56.

[19] Identified by Fée with the Aristolochia rotunda of Linnæus, Rounded birthwort, a native of the south of France and the southern parts of Europe. Littré gives the Aristolochia pallida of Willdenow.

[20] Most probably the Aristolochia longa of Linnæus, found in France, Spain, Portugal, and Italy. Littré gives as its synonym the Aristolochia parvifolia of Sibthorp.

[21] The Aristolochia clematis of Linnæus, almost identical with the Aristolochia Cretica and Bætica.

[22] The Aristolochia plistolochia of Linnæus, the Spanish branching stemmed birthwort. Fée thinks that these identifications, though probable enough, are not altogether satisfactory, and that the Greeks may have made these distinctions between varieties of the plant comparatively unknown to the rest of Europe. They are no longer held in any esteem for their medicinal properties.

which comes from Pontus; but whatever the soil may happen to be, the more weighty it is, the better adapted it is for medicinal purposes. The aristolochia with a round root is recommended for the stings of serpents, and that with an oblong root * * * * But in this is centred its principal reputation; applied to the uterus with raw beef, as a pessary, immediately after conception, it will ensure the birth of male[23] issue, they say. The fishermen on the coasts of Campania give the round root the name of "poison of the earth;" and I myself have seen them pound it with lime, and throw it into the sea; immediately on which the fish flew towards it with surprising avidity, and being struck dead in an instant, floated upon the surface.

The kind that is known as "polyrrhizos,"[24] is remarkably good, they say, for convulsions, contusions, and falls with violence, an infusion of the root being taken in water: the seed, too, is useful for pleurisy and affections of the sinews. It is considered, too, to be possessed of warming and strengthening properties, similar to those of satyrion,[26] in fact.

### CHAP. 55.—THE EMPLOYMENT OF THESE PLANTS FOR INJURIES INFLICTED BY SERPENTS.

But it will be as well now to mention the various uses made of these plants, and the effects produced by them, beginning with that most dangerous of all evils that can befall us, stings inflicted by serpents. In such cases the plant britannica[27] effects a cure, and the same is the case with the root of all the varieties of panaces,[28] administered in wine. The flower, too, and seed of panaces chironion are taken in drink, or applied externally with wine and oil: cunila bubula,[29] too, is looked upon as particularly useful for this purpose, and the root of polemonia or philetæris is taken in doses of four drachmæ in unmixed wine. Teucria,[30] sideritis,[31] and scordotis,[32] are used in wine, plants particularly good, all of them, for injuries inflicted by snakes; the juice or leaves, or else a decoction of

[23] See B. xxvi. c. 91.
[24] "With many roots."
[26] See B. xxvi. c. 62.
[27] See c. 6 of this Book.
[28] See cc. 11, 12, 13, 14, of this Book.
[29] See B. xx. c. 61.
[30] See B. xxiv. c. 80.
[31] See c. 15 of this Book.
[32] See c. 27 of this Book.

them, being taken in drink or applied to the wound. For a similar purpose also, the root of the greater centaury is taken, in doses of one drachma to three cyathi of white wine. Gentian, too, is particularly good for the stings of snakes, taken either fresh or dried, in doses of two drachmæ, mixed with rue and pepper in six cyathi of wine. The odour, too, of lysimachia[33] puts serpents to flight.

Chelidonia[34] is also given in wine to persons who have been stung; and betony in particular is used as an external application to the wound, a plant the virtues of which are so extraordinary, it is said, that if a circle of it is traced around a serpent, it will lash itself to death[35] with its tail. The seed of this plant is also administered in such cases, in doses of one denarius to three cyathi of wine; or else it is dried and powdered, and applied to the wound, in the proportion of three denarii of powder to one sextarius of water.

Cantabrica, dittany, and aristolochia, are also similarly used, one drachma of the root of this last plant being taken every now and then in a semisextarius of wine. It is very useful too, rubbed in with vinegar, and the same is the case, also, with plistolochia:[36] indeed it will be quite sufficient to suspend this last over the hearth, to make all serpents leave the house.

### CHAP. 56. (9.)—THE ARGEMONIA: FOUR REMEDIES.

The argemonia,[37] too, is remedial in such cases; the root of it being taken, in doses of one denarius, in three cyathi of wine. It will be as well, however, to enter into some further details in reference to this plant and others, which I shall have occasion next to mention; it being my intention first to describe, under each head, those plants which are the most efficacious for the treatment of the affection under consideration.

The argemonia has leaves like those of the anemone, but divided[38] like those of parsley: the head grows upon a slender stem resembling that of the wild poppy, and the root is also

[33] See c. 35 of this Book.

[34] See c. 50 of this Book.

[35] See B. xvi. c. 24.

[36] See c. 54 of this Book. As Fée remarks, these asserted remedies for the stings of serpents are not deserving of discussion.

[37] The Papaver argemone of Linnæus, the Rough poppy. It is a native of France, and many other parts of Europe.

[38] This, Fée remarks, is not stated by Dioscorides, whose description is more correct.

very similar to that of the same plant. The juice is of a saffron colour, acrid and pungent: the plant is commonly found in the fields of this country. Among us there are three[39] varieties of it distinguished, the one being the most highly approved of, the root of which smells[40] like frankincense.[41]

CHAP. 57.—AGARIC: THIRTY-THREE REMEDIES.

Agaric[42] is found growing in the form of a fungus of a white colour, upon the trees in the vicinity of the Bosporus. It is administered in doses of four oboli, beaten up in two cyathi of oxymel. The kind that grows in Galatia is generally looked upon as not so efficacious. The male[43] agaric is firmer than the other, and more bitter; it is productive too of head-ache. The female plant is of a looser texture; it has a sweet taste at first, which speedily changes into a bitter flavour.

CHAP. 58.—THE ECHIOS; THREE VARIETIES OF IT: TWO REMEDIES.

Of the echios there are two kinds; one[44] of which resembles pennyroyal in appearance, and has a concave leaf. It is administered, in doses of two drachmæ, in four cyathi of wine. The other[45] kind is distinguished by a prickly down, and bears small heads resembling those of vipers: it is usually taken in wine and vinegar. Some persons give the name of "echios personata"[46] to a kind of echios with larger leaves than the others, and burrs of considerable size, resembling that of the lappa.[47] The root of this plant is boiled and administered in vinegar.

[39] It is supposed by commentators that he is in error here, and that this description applies to the Lappa tanaria, mentioned in B. xxiv. c. 116.

[40] The root of the Papaver argemone has no such smell.

[41] See B. xxi. c. 94, B. xxiv. c. 116, and B. xxvi. c. 59.

[42] The Boletus agaricum of Aiton, or White agaric. It is a strong purgative, but is rarely used for that purpose.

[43] This distinction into male and female is no longer recognized, though it continued to be so till within the last century.

[44] Desfontaines identifies it with the Saponaria ocimoïdes. Fée thinks it may have possibly been some kind of sage, or else a variety of the Lavendula stœchas of Linnæus, French lavender. Littré gives the Silene Gallica of Linnæus, the Gallic catchfly.

[45] Identified by Fée with the Pseudanchusa, Echis, or Doris of B. xxii. c. 24, the Anchusa Italica of Linnæus. Littré gives the Echium rubrum of Linnæus.

[46] The Arctium lappa of Linnæus, probably, our Great clot-burr. See B. xxi. c. 51.

[47] See B. xxi. c. 64.

Henbane, pounded with the leaves on, is taken in wine, for the sting of the asp in particular.

### CHAP. 59.—HIERABOTANE, PERISTEREON, OR VERBENACA; TWO VARIETIES OF IT: TEN REMEDIES.

But among the Romans there is no plant that enjoys a more extended renown than hierabotane,[48] known to some persons as "peristereon,"[49] and among us more generally as "verbenaca."[50] It is this plant that we have already[51] mentioned as being borne in the hands of envoys when treating with the enemy, with this that the table of Jupiter is cleansed,[52] with this that houses are purified and due expiation made. There are two varieties of it: the one that is thickly covered with leaves[53] is thought to be the female plant; that with fewer leaves,[54] the male. Both kinds have numerous thin branches, a cubit in length, and of an angular form. The leaves are smaller than those of the quercus, and narrower, with larger indentations. The flower is of a grey colour, and the root is long and thin. This plant is to be found growing everywhere, in level humid localities. Some persons make no distinction between these two varieties, and look upon them as identical, from the circumstance of their being productive of precisely similar effects.

The people in the Gallic provinces make use of them both for soothsaying purposes, and for the prediction of future events; but it is the magicians more particularly that give utterance to such ridiculous follies in reference to this plant. Persons, they tell us, if they rub themselves with it will be sure to gain the object of their desires; and they assure us that it keeps away fevers, conciliates friendship, and is a cure for every possible disease; they say, too, that it must be gathered about the rising of the Dog-star—but so as not to be shone upon by sun or moon—and that honey-combs and honey must be first presented to the earth by way of expiation. They tell us also

[48] "Holy plant." [49] "Pigeon plant."

[50] Our "vervain." It was much used in philtres, and was as highly esteemed as the mistletoe by the people of Gaul. It is no longer used in medicine. [51] In B. xxii. c. 3.

[52] On the occasion of the Feasts of Jupiter in the Capitol, prepared by the Septemviri.

[53] The Verbena supina of Linnæus, Recumbent vervain.

[54] The Verbena officinalis of Linnæus, Vervain or holy plant.

that a circle must first be traced around it with iron; after which it must be taken up with the left hand, and raised aloft, care being taken to dry the leaves, stem, and root, separately in the shade. To these statements they add, that if the banqueting couch is sprinkled with water in which it has been steeped, merriment and hilarity will be greatly promoted thereby.

As a remedy for the stings of serpents, this plant is bruised in wine.

### CHAP. 60.—THE BLATTARIA: ONE REMEDY.

There is a plant very similar in appearance to verbascum,[55] so much so, indeed, as to be frequently gathered for it by mistake. The leaves,[56] however, are not so white, the stems are more numerous, and the flower is of a yellow colour. Thrown upon the ground, this plant attracts black beetles[57] to it, whence its Roman appellation "blattaria."

### CHAP. 61.—LEMONIUM: ONE REMEDY.

Lemonium[58] furnishes a milky juice, which thickens like gum. It grows in moist, watery localities, and is generally administered, in doses of one denarius, in wine.

### CHAP. 62.—QUINQUEFOLIUM, KNOWN ALSO AS PENTAPETES, PENTAPHYLLON, OR CHAMÆZELON: THIRTY-THREE REMEDIES.

There is no one to whom quinquefolium[59] is unknown, being recommended by a sort of strawberry[60] which it bears: The Greeks give it the name of pentapetes,[61] pentaphyllon,[61] and chamæzelon.[62] The root, when taken up, is red; but as it

[55] See c. 73 of this Book.

[56] Mostly identified with the third Phlomos, mentioned in c. 74 of this Book. Littré gives as its synonym the Phlomis fruticosa of Linnæus, Jerusalem sage, or tree-sage.

[57] "Blattæ."

[58] Not the "Limonion" of B. xx. c. 28, as the Statice limonium emits no juice. Desfontaines identifies it with the Scolymos or Limonia of B. xxii. c. 43; but Fée is inclined to think that Pliny is speaking of the Atractylis gummifera, but has made a mistake in the name.

[59] Or "five-leaved." Most probably the Potentilla reptans of Linnæus, our Cinquefoil, or Five-leaved grass. Sprengel, however, identifies it with the Tormentilla reptans of Linnæus, the Tormentil; and other authorities with the Potentilla rupestris of Linnæus.

[60] Its fruit is dry, and bears no resemblance to the strawberry.

[61] "Five-leaved."

[62] "Creeping on the ground."

dries it becomes black and angular. Its name is derived from the number of its leaves: it puts forth and withers with the leaves of the vine. This plant also is employed in the purification of houses.

### CHAP. 63.—THE SPARGANION: ONE REMEDY.

The root, too, of the plant known as the sparganion,[63] is taken in white wine, as a remedy for the stings of serpents.

### CHAP. 64.—FOUR VARIETIES OF THE DAUCUS: EIGHTEEN REMEDIES.

Petronius Diodotus has distinguished four kinds of daucus, which it would be useless here to describe, the varieties being in reality but two[64] in number. The most esteemed kind is that of Crete,[65] the next best being the produce of Achaia, and of all dry localities. It resembles fennel in appearance, only that its leaves are whiter, more diminutive, and hairy on the surface. The stem is upright, and a foot in length, and the root has a remarkably pleasant taste and smell. This kind grows in stony localities with a southern aspect.

The inferior sorts are found growing everywhere, upon declivities for instance, and in the hedges of fields, but always in a rich soil. The leaves are like those of coriander,[66] the stem being a cubit in length, the heads round, often three or more in number, and the root ligneous, and good for nothing when dry. The seed of this kind is like that of cummin, while that of the first kind bears a resemblance to millet; in all cases it is white, acrid, hot, and odoriferous. The seed of the second kind has more active properties than that of the first; for which reason it should be used more sparingly.

If it is considered really desirable to recognize a third

[63] Identified by Fée with the Sparganium ramosum of Linnæus, or Branchy burr-reed. Littré gives the Butonus umbellatus of Linnæus, the Flowering rush, or Water gladiole.

[64] Fée remarks, that the account given by Pliny has not the same precision as that of Dioscorides, who describes three varieties of the Daucus.

[65] Fée is inclined to identify the Daucus of Crete and Achaia with the Daucus Creticus of Fuchsius, the Athamanta annua of Linnæus. Desfontaines identifies it with the Athamanta Cretensis of Linnæus.

[66] This kind is identified by Fée with the Seseli ammoïdes of Linnæus, and by Littré with the Ammi majus of Linnæus, the Common or Greater bishop's weed.

variety of the daucus, there is a plant[67] of this nature very similar to the staphylinos, known as the "pastinaca[68] erratica," with an oblong seed and a sweet root. Quadrupeds will touch none of these plants, either in winter or in summer, except indeed, after abortion.[69] The seed of the various kinds is used, with the exception of that of Crete, in which case it is the root that is employed; this root being particularly useful for the stings of serpents. The proper dose is one drachma, taken in wine. It is administered also to cattle when stung by those reptiles.

### CHAP. 65.—THE THERIONARCA: TWO REMEDIES.

The therionarca, altogether a different plant from that of the Magi,[70] grows in our own climates, and is a branchy plant, with greenish leaves, and a rose-coloured flower. It has a deadly effect upon serpents, and the very contact of it is sufficient to benumb[71] a wild beast, of whatever kind it be.

### CHAP. 66.—THE PERSOLATA OR ARCION; EIGHT REMEDIES.

The persolata,[72] a plant known to every one, and called "arcion" by the Greeks, has a leaf, larger, thicker, more swarthy, and more hairy than that of the gourd even, with a large white root. This plant also is taken, in doses of two denarii, in wine.

[67] Identified by Sprengel with the Daucus Mauritanicus, and by Brotero and Desfontaines with the Daucus carota, var. *a*, our Common carrot. Fée seems inclined to identify it with the Athamanta cervaria of Linnæus, Mountain carrot, or Broad-leaved spignel. The account given by Pliny is, however, a mass of confusion.

[68] Or "wild parsnip." See B. xix. c. 27.

[69] For the purpose of expelling the dead fœtus, according to Dioscorides, B. iii. c. 83.

[70] See B. xxiv. c. 102. The plant here spoken of has not been identified, but the Epilobium angustifolium, montanum, tetragonum, &c., varieties of the Willow-herb, have been suggested. They are destitute, however, of all poisonous qualities.

[71] Hence its name—"Benumbing wild beasts."

[72] Fée thinks that there is an error in the name, and that it is the "personata" that is here spoken of, the plant already mentioned in c. 58 of this Book. Hardouin identifies it with the Tussilago petasites—the Butterburr, according to Nemnich—but apparently without any sufficient authority.

CHAP. 67.—CYCLAMINOS OR TUBER TERRÆ: TWELVE REMEDIES.

So too, the root of cyclaminos[73] is good for injuries inflicted by serpents of all kinds. It has leaves smaller than those of ivy, thinner, more swarthy, destitute of angles, and covered with whitish spots. The stem is thin and hollow, the flowers of a purple colour, and the root large and covered with a black rind; so much so, in fact, that it might almost be taken for the root of rape. This plant grows in umbrageous localities, and by the people of our country is known as the "tuber terræ."[74] It ought to be grown in every house, if there is any truth in the assertion that wherever it grows, noxious spells can have no effect. This plant is also what is called an "amulet;" and taken in wine, they say, it produces all the symptoms and appearances of intoxication. The root is dried, cut in pieces, like the squill, and put away for keeping. When wanted, a decoction is made of it, of the consistency of honey. Still, however, it has some deleterious[75] properties; and a pregnant woman, it is said, if she passes over the root of it, will be sure to miscarry.

CHAP. 68.—THE CYCLAMINOS CISSANTHEMOS: FOUR REMEDIES.

There is also another kind of cyclaminos, known by the additional name of "cissanthemos;"[76] the stems of it, which are jointed, are good for nothing. It is altogether different from the preceding plant, and entwines around the trunks of trees. It bears a berry similar to that of the ivy, but soft; and the flower is white and pleasing to the sight. The root is never used. The berries are the only part of it in use, being of an

[73] Fée identifies it with the Cyclamen hederæfolium of Aiton, the Ivy-leaved sow-bread; Littré with the Cyclamen Græcum of Lamarck.

[74] "Tuberosity of the earth."

[75] "Suum venenum ei est." Gerard seems to have had a worse opinion of it than our author; for he states in his Herbal, p. 845, that he had experienced great misfortunes owing to his *imprudence* in having cultivated Cyclamen in his garden.

[76] "Ivy-flowered." It resembles the other plant in nothing but the name. Fée is inclined, with Desfontaines, to identify it with the Lonicera caprifolium of Linnæus, the Italian honeysuckle, though that plant bears no resemblance in either leaf or flower to the ivy. The Lonicera periclymenum of Linnæus, the Common woodbine or honeysuckle, has been also suggested, as well as the Bryonia alba, Solanum dulcamara, and Cucubalus bacciferus.

acrid, viscous taste. They are dried in the shade, after which they are pounded and divided into lozenges.

CHAP. 69.—THE CYCLAMINOS CHAMÆCISSOS: THREE REMEDIES.

A third kind[77] of cyclaminos has also been shown to me, the additional name of which is "chamæcissos." It consists of but a single leaf, with a branchy root, formerly employed for killing fish.

CHAP. 70.—PEUCEDANUM: TWENTY-EIGHT REMEDIES.

But in the very first rank among these plants, stands peucedanum,[78] the most esteemed kind of which is that of Arcadia, the next best being that of Samothrace. The stem resembles that of fennel, is thin and long, covered with leaves close to the ground, and terminating in a thick black juicy root, with a powerful smell. It grows on umbrageous mountains, and is taken up at the end of autumn. The largest and tenderest roots are the most esteemed; they are cut with bone-knives into slips four fingers in length, and left to shed their juice[79] in the shade; the persons employed taking the precaution of rubbing the head and nostrils with rose-oil, as a preservative against vertigo.

There is also another kind of juice, which adheres to the stems, and exudes from incisions made therein. It is considered best when it has arrived at the consistency of honey: the colour of it is red, and it has a strong but agreeable smell, and a hot, acrid taste. This juice, as well as the root and a decoction of it, enters into the composition of numerous medicaments, but the juice has the most powerful properties of the two. Diluted with bitter almonds or rue, it is taken in drink as a remedy for injuries inflicted by serpents. Rubbed upon the body with oil, it is a preservative against the attacks of those reptiles.

[77] According to Brotero, it is the Parnassia palustris of Tournefort, an opinion with which Fée is inclined to agree. Sprengel considers it to be the same as the Convallaria bifolia of Linnæus, our Small lily of the valley, and identifies it with the one-leafed Ceratia of B. xxvi. c. 34. Littré names the Antirrhinum asarina of Linnæus, the Bastard asarum.

[78] The Peucedanum officinale of Linnæus, Sulphur-wort, or Hog's fennel. It receives its name from a fancied resemblance between its fruit and that of the "Peuce," or pitch-tree.

[79] This juice, Fée remarks, is no longer known.

CHAP. 71. (10.)—EBULUM: SIX REMEDIES.

A fumigation, too, of ebulum,[80] a plant known to every one, will put serpents to flight.

CHAP. 72.—POLEMONIA: ONE REMEDY.

The root of polemonia,[81] even worn as an amulet only, is particularly useful for repelling the attacks of scorpions, as also the phalangium and other small insects of a venomous nature. For injuries inflicted by the scorpion, aristolochia[82] is also used, or agaric, in doses of four oboli to four cyathi of wine. For the bite of the phalangium, vervain is employed, in combination with wine or oxycrate: cinquefoil, too, and daucus, are used for a similar purpose.

CHAP. 73.—PHLOMOS OR VERBASCUM: FIFTEEN REMEDIES.

Verbascum has the name of "phlomos" with the Greeks. Of this plant there are two principal kinds; the white,[83] which is considered to be the male, and the black,[84] thought to be the female. There is a third[85] kind, also, which is only found in the woods. The leaves of these plants are larger than those of the cabbage, and have a hairy surface: the stem is upright, and more than a cubit in height, and the seed black, and never used. The root is single, and about the thickness of the finger. The two principal kinds are found growing in champaign localities. The wild verbascum has leaves like those of elelisphacus,[86] but of an elongated form; the branches are ligneous.

CHAP. 74.—THE PHLOMIS: ONE REMEDY. THE LYCHNITIS OR THRYALLIS.

There are also two[87] varieties of the phlomis, hairy plants,

[80] Or Wall-wort. See B. xxiv. c. 35. and B. xxvi. c. 49.

[81] See c. 28 of this Book. [82] See c. 54 of this Book.

[83] Identified by Fée with the Verbascum thapsus of Linnæus, Great mullein, High-taper, or Cow's lung-wort.

[84] Identified by Fée with the Verbascum sinuatum of Linnæus. Desfontaines considers *this* to be the male plant of Pliny, and the V. thapsus to be the female.

[85] Fée considers this to be the same as the Blattaria mentioned in c. 60, and identifies it with the Verbascum phlomoïdes of Linnæus. Sprengel and Desfontaines consider it to be the Phlomis lychnitis of Linnæus. Littré gives the Phlomis fruticosa of Linnæus, the Jerusalem sage, or Tree sage.

[86] See B. xxii. c 71.

[87] Fée identifies these two kinds with the Phlomis fruticosa of Linnæus;

with rounded leaves, and but little elevated above the surface of the earth. A third kind, again, is known as the "lychnitis"[88] by some persons, and as the "thryallis" by others: it has three leaves only, or four at the very utmost, thick and unctuous, and well adapted for making wicks for lamps. The leaves of the phlomos which we have mentioned as the female plant, if wrapped about figs, will preserve them most efficiently from decay, it is said. It seems little better than a loss of time to give the distinguishing characteristics of these three[89] kinds, the effects of them all being precisely the same.

For injuries inflicted by scorpions, an infusion of the root is taken, with rue, in water. Its bitterness is intense, but it is quite as efficacious as the plants already mentioned.

### CHAP. 75.—THE THELYPHONON OR SCORPIO: ONE REMEDY.

The thelyphonon[90] is a plant known as the "scorpio" to some, from the peculiar form of its roots, the very touch of which kills[91] the scorpion: hence it is that it is taken in drink for stings inflicted by those reptiles. If a dead scorpion is rubbed with white hellebore, it will come to life, they say. The thelyphonon is fatal to all quadrupeds, on the application of the root to the genitals. The leaf too, which bears a resemblance to that of cyclaminos, is productive of a similar effect, in the course of the same day. It is a jointed plant, and is found growing in unbrageous localities. Juice of betony or of plantago is a preservative against the venom of the scorpion.

### CHAP. 76.—THE PHRYNION, NEURAS, OR POTERION; ONE REMEDY.

Frogs, too, have their venom, the bramble-frog[92] in particular,

Sprengel and Desfontaines consider the second kind to be the Phlomis Italica of Smith; on insufficient grounds, Fée thinks. Littré mentions the Sideritis Romana and S. elegans of Linnæus.

[88] The "Lamp plant." It is mostly identified with the Verbascum lychnitis of Linnæus, the White mullein. Fée is somewhat doubtful on the point. It is doubtful whether it is not the same as the Thryallis, mentioned in B. xxi. c. 61. Littré identifies it with the Phlomis lychnitis.

[89] In the last paragraph he is speaking of the Phlomos, here he evidently reverts to the Phlomis.

[90] Or "Female killer." See B. xxvii. c. 2.

[91] Dioscorides states, somewhat more rationally, that this plant strikes the scorpion with torpor, and that the contact of hellebore revives it.

[92] "Rubetis." A kind of toad, probably. See B. viii. c. 48, B. xi. c. 16, and B. xxxii. c. 18.

and I myself have seen the Psylli, in their exhibitions, irritate them by placing them upon flat vessels made red hot,[93] their bite being fatal more instantaneously than the sting even of the asp. One remedy for their poison is the phrynion,[94] taken in wine, which has also the additional names of "neuras"[95] and "poterion:" it bears a small flower, and has numerous fibrous roots, with an agreeable smell.

### CHAP. 77.—THE ALISMA, DAMASONION, OR LYRON: SEVENTEEN REMEDIES.

Similar, too, are the properties of the alisma,[96] known to some persons as the "damasonion," and as the "lyron" to others. The leaves of it would be exactly those of the plantago, were it not that they are narrower, more jagged at the edges, and bent downwards in a greater degree. In other respects, they present the same veined appearance as those of the plantago. This plant has a single stem, slender, a cubit in height, and terminated by a spreading head.[97] The roots of it are numerous, thin like those of black hellebore, acrid, unctuous, and odoriferous: it is found growing in watery localities.

There is another kind also, which grows in the woods, of a more swarthy colour, and with larger leaves. The root of them both is used for injuries inflicted by frogs and by the sea-hare,[98] in doses of one drachma taken in wine. Cyclaminos, too, is an antidote for injuries inflicted by the sea-hare.

The bite of the mad dog has certain venomous properties, as an antidote to which we have the cynorrhodos, of which

[93] Schneider, on Nicander's Alexiph. p. 277, says that he cannot understand this passage. There is little doubt that Sillig is right in his conjecture that it is imperfect, for the pith of the narrative, whatever it may have been, is evidently wanting. The Psylli were said to be proof against all kinds of poisons. See B. viii. c. 38, and B. xi. c. 30; also Lucan's Pharsalia, B. ix. l. 192, *et seq.*

[94] See also B. xxvii. c. 97. Fée identifies it with the Astragalus Creticus of Lamarck, Desfontaines with the Astragalus poterium.

[95] The "nerve-plant" and the "drinking-plant," apparently.

[96] Sprengel identifies it with the Alisma Parnassifolium of Linnæus; but as that plant is not found in Greece, Sibthorp suggests the Alisma plantago of Linnæus, the Great water-plantain. It has no medicinal properties, though it was esteemed till very recent times as curative of hydrophobia.

[97] "Capite thyrsi."

[98] See B. ix. c. 72, and B. xxxii. c. 3.

we have spoken[99] elsewhere already. The plantago is useful for the bites of all kinds of animals, either taken in drink or applied topically to the part affected. Betony is taken on similar occasions, in old wine, unmixed.

### CHAP. 78.—PERISTEREOS: SIX REMEDIES.

The name of peristereos[1] is given to a plant with a tall stem, covered with leaves, and throwing out other stems from the top. It is much sought by pigeons, to which circumstance it owes its name. Dogs will never bark, they say, at persons who have this plant about them.

### CHAP. 79.—REMEDIES AGAINST CERTAIN POISONS.

Closely approaching in their nature to these various kinds of poisons, are those which have been devised by man for his own destruction. In the number of antidotes to all these artificial poisons as well as to the spells of sorcery, the very first place must be accorded to the moly[2] of Homer; next to which come the mithridatia,[3] scordotis,[4] and centaury. The seed of betony carries off all kinds of noxious substances by stool; being taken for the purpose in honied wine or raisin wine, or else pulverized, and taken, in doses of one drachma, in four cyathi of old wine: in this last case, however, the patient must bring it off the stomach by vomit and then repeat the dose. Persons who accustom themselves to take this plant daily, will never experience any injury, they say, from substances of a poisonous nature.

When a person has taken poison, one most powerful remedy is aristolochia,[5] taken in the same proportions as those used for injuries inflicted by serpents.[6] The juice, too, of cinquefoil is given for a similar purpose; and in both cases, after the patient has vomited, agaric is administered, in doses of one denarius, in three cyathi of hydromel.

[99] In c. 6 of this Book.

[1] "Pigeon-plant." The same as Vervain, already described in c. 59 of this Book.

[2] See c. 8 of this Book.

[3] By "Mithridatia" he probably means the antidotes attributed to Mithridates in c. 3 of this Book, and in B. xxix. c. 8, and not the plant previously mentioned in c. 26.

[4] See c. 27 of this Book.

[5] See c. 54 of this Book.

[6] See c. 55.

### CHAP. 80.—THE ANTIRRHINUM, ANARRHINON, OR LYCHNIS AGRIA: THREE REMEDIES.

The name of antirrhinum[7] or anarrhinon is given to the lychnis agria,[8] a plant which resembles flax in appearance, is destitute of root, has a flower like that of the hyacinth, and a seed similar in form to the muzzle of a calf. According to what the magicians say, persons who rub themselves with this plant improve their personal appearance thereby; and they may ensure themselves against all noxious substances and poisons, by wearing it as a bracelet.

### CHAP. 81.—EUCLEA: ONE REMEDY.

The same is the case, too, with the plant to which they give the name of "euclea,"[9] and which, they tell us, rubbed upon the person, will ensure a more extended consideration. They say, too, that if a person carries artemisia[10] about him, he will be ensured against all noxious drugs, the attacks of wild beasts of every kind, and sunstroke even. This last plant is taken also in wine, in cases of poisoning by opium. Used as an amulet, or taken in drink, it is said to be particularly efficacious for injuries inflicted by frogs.

### CHAP. 82.—THE PERICARPUM; TWO VARIETIES OF IT: TWO REMEDIES.

The pericarpum is a kind of bulbous plant. There are two varieties of it; one with a red[11] outer coat, and the other,[12]

[7] Generally identified with the Antirrhinum Orontium of Linnæus, Small toad-flax, Calf's snout, or Lesser wild snapdragon. Desfontaines mentions the Antirrhinum purpureum, and Littré the A. majus of Linnæus, the Common snapdragon, or Greater calf's snout.

[8] "Wild lychnis."

[9] Theophrastus says, B. ix. c. 21, speaking of the last-mentioned plant, "The same too, with reference to glory and consideration." Pliny, singularly enough, has mistaken the Greek word "eucleia" (glory) for the name of a plant, and has fabricated one accordingly: a similar blunder to that made by him with reference to "hippace," in c. 44 of this Book.

[10] See c. 36 of this Book.

[11] Fée is inclined to identify it with the Bulbine of B. xx. c. 41, probably the Hyacinthus botryoïdes of Linnæus, the Blue grape hyacinth. Brotero and Desfontaines name the Hyacinthus comosus, the Purple grape hyacinth. Littré mentions the Ornithogalum nutans of Linnæus, the May star of Bethlehem.

[12] Identified by Fée with the Bulbus vomitorius or Bulb emetic of B. xx.

similar in appearance to the black poppy, and possessed of greater virtues than the first. They are both, however, of a warming nature, for which reason they are administered to persons who have taken hemlock, a poison for which frankincense and panaces are used, chironion[13] in particular. This last, too, is given in cases of poisoning by fungi.

### CHAP. 83. (11.)—REMEDIES FOR DISEASES OF THE HEAD. NYMPHÆA HERACLIA: TWO REMEDIES.

But we shall now proceed to point out the various classes of remedies for the several parts of the body, and the maladies to which those parts are subject, beginning in the first place with the head.

The root of nymphæa heraclia[14] effects the cure of alopecy, if they are beaten up together,[15] and applied. The polythrix[16] differs from the callitrichos[17] in having white, rushlike suckers, larger leaves, and more numerous; the main stem,[18] too, is larger. This plant strengthens the hair, prevents it from falling off, and makes it grow more thickly.

### CHAP. 84.—THE LINGULACA: ONE REMEDY.

The same is the case too with the lingulaca,[19] a plant that grows in the vicinity of springs, and the root of which is reduced to ashes, and beaten up with hog's lard. Due care must be taken, however, that it is the lard of a female, of a black colour, and one that has never farrowed. The application is rendered additionally efficacious, if the ointment is applied in the sun. Root, too, of cyclaminos is employed in the same

c. 41, the same, in his opinion, with the Narcissus jonquilla, the Emetic jonquil. Sprengel, however, would identify the Bulbus vomitorius with either the Narcissus orientalis or the Pancratium Illyricum; and Sibthorp considers its synonym to be the Ornithogalum stachyoïdes of Aiton. Littré gives the Muscari comosum.

[13] See c. 13 of this Book.

[14] See c. 37 of this Book, and B. xxvi. c. 28.

[15] There seems to be an hiatus here. From the words of Dioscorides, B. iii. c. 138, it would appear that pitch was the other ingredient, to be beaten up with the plant.

[16] The same as the Polytrichos of B. xxii. c. 30.

[17] In B. xxii. c. 30, he makes them to be the same plant, and it is most probable that they may be both referred to the Asplenium trichomanes of Linnæus.

[18] "Frutice."

[19] See B. xxiv. c. 108.

manner for a similar purpose. A decoction of root of hellebore in oil or in water is used for the removal of porrigo. For the cure of head-ache, root of all kinds of panaces[20] is used, beaten up in oil; as also aristolochia[21] and iberis,[22] this last being applied to the head for an hour or more, if the patient can bear it so long, care being taken to bathe in the meanwhile. The daucus, too, is curative of head-ache. Cyclaminos,[23] introduced into the nostrils with honey, clears the head; used in the form of a liniment, it heals ulcers of the head. Peristereos,[24] also, is curative of diseases of the head.

### CHAP. 85.—THE CACALIA OR LEONTICE: THREE REMEDIES.

The name of "cacalia"[25] or "leontice" is given to a plant with seed resembling small pearls in appearance, and hanging down between large leaves: it is mostly found upon mountains. Fifteen grains of this seed are macerated in oil, and the head is rubbed with the mixture, the contrary way to the hair.

### CHAP. 86.—THE CALLITRICHOS: ONE REMEDY.

A sternutatory, too, is prepared from the callitrichos.[26] The leaves of this plant are similar to those of the lentil, and the stems resemble fine rushes; the root is very diminutive. It grows in shady, moist localities, and has a burning taste in the mouth.

### CHAP. 87.—HYSSOP: TEN REMEDIES.

Hyssop,[27] beaten up in oil, is curative of phthiriasis and

[20] See c. 11 of this Book.
[21] See c. 54 of this Book.
[22] See c. 49 of this Book.
[23] See c. 67 of this Book.
[24] Or Vervain.
[25] Sprengel identified this plant at first with the Buplevrum longifolium of Linnæus, the Long-leaved hare's ear, but at a later period with the Mercurialis tomentosa, the Woolly mercury. Fée suggests the Cacalia petasites or albifrons, though with diffidence. Littré gives the Cacalia verbascifolia of Sibthorp.
[26] See c. 83 of this Book; also B. xxii. c. 30, and B. xxvii. c. 111.
[27] There has been much discussion on the identification of the Hyssopum of the ancients, their descriptions varying very considerably. It has been suggested that that of the Egyptians was the Origanum Ægyptianum; that of the Hebrews, the Origanum Syriacum; that of Dioscorides, the Origanum Smyrnæum; and that of the other Greek writers, the Teucrium pseudohyssopus, or else the Thymbra verticillata and spicata. Fée is inclined to identify that here mentioned by Pliny with the Thymbra spicata of Linnæus, and the Garden hyssop of Dioscorides, with the Hyssopus officinalis

prurigo of the head. The best hyssop is that of Mount Taurus in Cilicia, next to which in quality is the produce of Pamphylia and Smyrna. This plant is injurious to the stomach: taken with figs, it produces alvine evacuations, and used in combination with honey, it acts as an emetic. It is generally thought that, beaten up with honey, salt, and cummin, it is curative of the stings of serpents.

CHAP. 88.—THE LONCHITIS: FOUR REMEDIES.

The lonchitis [29] is not, as most writers have imagined, the same plant as the xiphion[30] or phasganion, although the seed of it does bear a resemblance to the point of a spear. The lonchitis, in fact, has leaves like those of the leek, of a reddish colour near the root, and more numerous there than on the upper part of the stem. It bears diminutive heads, which are very similar to our masks of comedy, and from which a small tongue protrudes:[31] the roots of it are remarkably long. It grows in thirsty, arid soils.

CHAP. 89.—THE XIPHION OR PHASGANION: FOUR REMEDIES.

The xiphion[32] or phasganion, on the other hand, is found growing in humid localities. On first leaving the ground it has the appearance of a sword; the stem of it is two cubits in length, and the root is fringed like a hazel nut.[33]

This root should always be taken up before harvest, and dried in the shade. The upper part of it, pounded with frankincense, and mixed with an equal quantity of wine, extracts fractured bones of the cranium, purulent matter in all parts of the body, and bones of serpents,[34] when accidentally

of Linnæus. Littré states, however, that this last is a stranger to Greece, and that M. Fräas (*Synopsis*, p. 182) identifies the hyssop of Dioscorides with the Origanum Smyrnæum or Syriacum.

[29] Generally identified with the Serapias lingua of Linnæus.

[30] The same, most probably, as the Gladiolus of B. xxi. c. 67. See also the next Chapter in this Book.

[31] This was a characteristic feature of the masks used in the Roman Comedy.

[32] See Note 30 above. The medicinal properties here attributed to the Xiphion, or Gladiolus communis, our common Red corn-flag, are very doubtful, as Fée remarks.

[33] With the outer coat on, of course.

[34] Dalechamps is probably right in preferring the reading "carpentis" to "serpentis," in which case the meaning would be, "or bones when accidentally crushed by the wheels of vehicles."

trodden upon; it is very efficacious, too, for poisons. In cases of head-ache, the head should be rubbed with hellebore, boiled and beaten up in olive oil, or oil of roses, or else with peucedanum steeped in olive oil or rose oil, and vinegar. This last plant, made lukewarm, is very good also for hemicrania[35] and vertigo. It being of a heating nature, the body is rubbed with the root as a sudorific.

CHAP. 90.—PSYLLION, CYNOÏDES, CRYSTALLION, SICELICON, OR CYNOMYIA; SIXTEEN REMEDIES. THRYSELINUM: ONE REMEDY.

Psyllion,[36] cynoïdes, crystallion, sicelicon, or cynomyia, has a slender root, of which no use is made, and numerous thin branches, with seeds resembling those of the bean, at the extremities.[37] The leaves of it are not unlike a dog's head in shape;[38] and the seed, which is enclosed in berries, bears a resemblance to a flea—whence its name "psyllion." This plant is generally found growing in vineyards, is of a cooling nature, and is extremely efficacious as a dispellent. The seed of it is the part made use of; for head-ache, it is applied to the forehead and temples with rose oil and vinegar, or else with oxycrate: it is used as a liniment for other purposes also. Mixed in the proportion of one acetabulum to one sextarius of water, it is left to coagulate and thicken; after which it is beaten up, and the thick solution is used as a liniment for all kinds of pains, abscesses, and inflammations.

Aristolochia is used as a remedy for wounds in the head; it has the property, too, of extracting fractured bones, not only from other parts of the body, but the cranium in particular. The same, too, with plistolochia.

Thryselinum[39] is a plant not unlike parsley; the root of it, eaten, carries off pituitous humours from the head.

[35] Or "meagrim."

[36] Identified with the Plantago Psyllium of Linnæus, our Fleawort, Fleaseed, or Fleabane.

[37] Nothing, Fée says, can be more absurd than this description of the plant.

[38] Whence its name "cynoïdes" and "cynomyia."

[39] This plant has not been identified; Wild water-parsley, perhaps a kind of Sium, has been suggested.

CHAP. 91. (12.)—REMEDIES FOR DISEASES OF THE EYES.

It is generally thought that the greater centaury[40] strengthens the sight, if the eyes are fomented with it steeped in water; and that by employing the juice of the smaller kind, in combination with honey, films and cloudiness may be dispersed, marks obliterated, and small flies removed which have got into the eye. It is thought also that sideritis is curative of albugo in beasts of burden. As to chelidonia,[41] it is marvellously good for all the affections above mentioned. Root of panaces[42] is applied, with polenta,[43] to defluxions of the eyes; and for the purpose of keeping them down, henbane-seed is taken, in doses of one obolus, with an equal proportion of opium, in wine. Juice, too, of gentian is used as a liniment, and it sometimes forms an ingredient in the more active eyesalves,[44] as a substitute for meconium. Euphorbia,[45] applied in the form of a liniment, improves the eyesight, and for ophthalmia juice of plantago[46] is injected into the eyes.

Aristolochia disperses films upon the eyes; and iberis,[47] attached to the head with cinquefoil, is curative of defluxions and other diseases of the eyes. Verbascum[48] is applied topically to defluxions of the eyes, and vervain is used for a similar purpose, with rose oil and vinegar. For the treatment of cataract and dimness of sight, cyclaminos is reduced to a pulp and divided into lozenges. Juice, too, of peucedanum, as already mentioned,[49] mixed with meconium and oil of roses, is good for the sight, and disperses films upon the eyes. Psyllion,[50] applied to the forehead, arrests defluxions of the eyes.

CHAP. 92. (13.)—THE ANAGALLIS, OR CORCHORON; TWO VARIETIES OF IT: SIX REMEDIES.

The anagallis is called "corchoron"[51] by some. There are

[40] All the plants here mentioned are of a more or less irritating nature, and would greatly imperil the sight.

[41] See c. 50 of this Book.

[42] See c. 11 of this Book.

[43] See B. xviii. c. 14, and B. xxii. c. 59.

[44] "Collyriis."

[45] A most dangerous application, in reality.

[46] A comparatively harmless, though useless application.

[47] See c. 49 of this Book.

[48] See c. 73 of this Book.

[49] In c. 70 of this Book.

[50] See c. 90 of this Book.

[51] The Corchorus of B. xxi. c. 106, is most probably altogether a different plant.

two kinds of it, the male[52] plant, with a red blossom, and the female,[53] with a blue flower. These plants do not exceed a palm in height, and have a tender stem, with diminutive leaves of a rounded form, drooping upon the ground. They grow in gardens and in spots covered with water, the blue anagallis being the first to blossom. The juice[54] of either plant, applied with honey, disperses films upon the eyes, suffusions of blood[55] in those organs resulting from blows, and argema[56] with a red tinge: if used in combination with Attic honey, they are still more efficacious. The anagallis has the effect also of dilating[57] the pupil; hence the eye is anointed with it before the operation of couching[58] for cataract. These plants are employed also for diseases of the eyes in beasts of burden.

The juice, injected into the nostrils, which are then rinsed with wine, acts as a detergent upon the head: it is taken also, in doses of one drachma, in wine, for wounds inflicted by serpents. It is a remarkable fact, that cattle will refuse to touch the female plant; but if it should so happen that, deceived by the resemblance—the flower being the only distinguishing mark—they have accidentally tasted it, they immediately have recourse, as a remedy, to the plant called "asyla,"[59] but more generally known among us as "ferus oculus."[60] Some persons recommend those who gather it, to prelude by saluting it before sunrise, and then, before uttering another word, to take care and extract the juice immediately; if this is done, they say, it will be doubly efficacious.

As to the juice of euphorbia, we have spoken[61] of its properties at sufficient length already. In cases of ophthalmia,

[52] Identified with the Anagallis arvensis of Linnæus, with a red flower, the Red pimpernel, Corn pimpernel, or Shepherd's weather-glass.

[53] The Anagallis cæruleo flore of Tournefort, the Blue pimpernel.

[54] In reality they are destitute of medicinal properties. It is said, though apparently on no sufficient grounds, that red pimpernel is poisonous to small birds.

[55] Or "blood-shot eyes."

[56] A disease of the pupil.

[57] Belladonna, a preparation from the Atropa belladonna, is now generally used for this purpose.

[58] "Paracentesis."

[59] This plant is unknown. Fée suggests that Pliny may have made a mistake, and that the account from which he copies may have been, that when cattle have been stung by the asilus, or gadfly, they have recourse to the Anagallis.

[60] "Savage eye."

[61] In c. 38 of this Book.

attended with swelling, it will be a good plan to apply wormwood beaten up with honey, as well as powdered betony.

### CHAP. 93.—THE ÆGILOPS: TWO REMEDIES.

The fistula of the eye, called "ægilops," is cured by the agency of the plant of the same name,[62] which grows among barley, and has a leaf like that of wheat. The seed is pounded for the purpose, and applied with meal; or else the juice is extracted from the stem and more pulpy leaves, the ears being first removed. This juice is incorporated with meal of three-month wheat, and divided into lozenges.

### CHAP. 94.—MANDRAGORA, CIRCÆON, MORION, OR HIPPOPHLOMOS; TWO VARIETIES OF IT: TWENTY-FOUR REMEDIES.

Some persons, too, were in the habit of employing mandragora for diseases of the eyes; but more recently, the use of it for such a purpose has been abandoned. It is a well-ascertained fact, however, that the root, beaten up with rose oil and wine, is curative of defluxions of the eyes and pains in those organs; and, indeed, the juice of this plant still forms an ingredient in many medicaments for the eyes. Some persons give it the name of "circæon."[63] There are two varieties, the white[64] mandragora, which is generally thought to be the male plant, and the black,[65] which is considered to be the female. It has a leaf narrower than that of the lettuce, a hairy stem, and a double or triple root, black without and white within, soft and fleshy, and nearly a cubit in length.

Both kinds bear a fruit about the size of a hazel-nut, enclosing a seed resembling the pips of a pear in appearance. The name given to the white plant by some persons is "arsen,"[66] by others "morion,"[67] and by others again, "hippophlomos." The leaves of it are white, while those of the other

[62] See B. xviii. c. 44, and B. xxi. c. 63.

[63] Or "Plant of Circe."

[64] Identified by Fée with the Atropa mandragora vernalis of Bertolini, the Spring mandrake.

[65] The Atropa mandragora autumnalis of Bertolini, the Autumnal mandrake.

[66] The Greek for "male."

[67] "Dementing." Fée remarks that the "Morion" in reality is a different plant, and queries whether it may not be the Atropa belladonna of Linnæus, the Belladonna, or Deadly nightshade, mentioned above in Note 57.

one[68] are broader, and similar to those of garden lapathum[69] in appearance. Persons, when about to gather this plant, take every precaution not to have the wind blowing in their face; and, after tracing three circles round it with a sword, turn towards the west and dig it up.[70] The juice is extracted both from the fruit and from the stalk, the top being first removed; also from the root, which is punctured for the purpose, or else a decoction is made of it. The filaments, too, of the root are made use of, and it is sometimes cut up into segments and kept in wine.

It is not the mandragora of every country that will yield a juice, but where it does, it is about vintage time that it is collected: it has in all cases a powerful odour, that of the root and fruit the most so. The fruit is gathered when ripe, and dried in the shade; and the juice, when extracted, is left to thicken in the sun. The same is the case, too, with the juice of the root, which is extracted either by pounding it or by boiling it down to one third in red wine. The leaves are best, kept in brine; indeed, when fresh, the juice of them is a baneful poison,[71] and these noxious properties are far from being entirely removed, even when they are preserved in brine. The very odour of them is highly oppressive to the head, although there are countries in which the fruit is eaten. Persons ignorant of its properties are apt to be struck dumb by the odour of this plant when in excess, and too strong a dose of the juice is productive of fatal effects.

Administered in doses proportioned to the strength of the patient, this juice has a narcotic effect; a middling dose being one cyathus. It is given, too, for injuries inflicted by serpents, and before incisions or punctures are made in the body, in

[68] The female, or black, mandrake.

[69] See B. xx. c. 85.

[70] The superstitions with reference to the Mandrake extended from the earliest times till a very recent period. It was used in philtres, and was supposed to utter piercing cries when taken up; Josephus counsels those whose business it is to do so, to employ a dog for the purpose, if they would avoid dreadful misfortunes. All these notions probably arose from the resemblance which the root bears to the legs and lower part of the human body. See B. xxii. c. 9, where we have queried in a Note whether the Eryngium may not have been the "mandrake," the possession of which was so much coveted by the wives of Jacob.

[71] "Pestis est."

order to ensure insensibility to the pain.[72] Indeed, for this last purpose, with some persons, the odour of it is quite sufficient to induce sleep. The juice is taken also as a substitute for hellebore, in doses of two oboli, in honied wine: hellebore, however, is more efficacious as an emetic, and as an evacuant of black bile.

### CHAP. 95.—HEMLOCK: THIRTEEN REMEDIES.

Hemlock,[73] too, is a poisonous plant, rendered odious by the use made of it by the Athenian people, as an instrument of capital punishment: still,[74] however, as it is employed for many useful purposes, it must not be omitted. It is the seed that is noxious, the stalk being eaten by many people, either green, or cooked[75] in the saucepan. This stem is smooth, jointed like a reed, of a swarthy hue, often as much as two cubits in height, and branchy at the top. The leaves are like those of coriander, only softer, and possessed of a powerful odour. The seed is more substantial than that of anise, and the root is hollow and never used. The seed and leaves are possessed of refrigerating properties; indeed, it is owing to these properties that it is so fatal, the cold chills with which it is attended commencing at the extremities. The great remedy[76] for it, provided it has not reached the vitals, is wine, which is naturally of a warming tendency; but if it is taken in wine, it is irremediably fatal.

A juice is extracted from the leaves and flowers; for it is at the time of its blossoming that it is in its full vigour. The seed is crushed, and the juice extracted from it is left to thicken in the sun, and then divided into lozenges. This

[72] In the same way that chloroform is now administered.

[73] "Cicuta." Identified with the Conium maculatum of Linnæus, Common hemlock or Keghs. It grows in the vicinity of Athens, and probably formed the basis of the poisons with which that volatile people "recompensed," as Fée remarks, the virtues and exploits of their philosophers and generals. Socrates, Phocion, and Philopœmen, are said to have been poisoned with hemlock; but in the case of Socrates, it was probably combined with opium and other narcotics. See B. xiv. cc. 7, 28, and B. xxiii. c. 23.

[74] He has more than once stated, that it is not his object to enter into a description of poisons.

[75] Fée doubts if it is possible to eat it, boiled even, with impunity.

[76] See B. xiv. cc. 7, 28, and B. xxiii. c. 23.

preparation proves fatal by coagulating the blood—another deadly property which belongs to it; and hence it is that the bodies of those who have been poisoned by it are covered with spots. It is sometimes used in combination with water as a medium for diluting certain medicaments. An emollient poultice is also prepared from this juice, for the purpose of cooling the stomach; but the principal use made of it is as a topical application, to check defluxions of the eyes in summer, and to allay pains in those organs. It is employed also as an ingredient in eyesalves, and is used for arresting fluxes in other parts of the body: the leaves, too, have a soothing effect upon all kinds of pains and tumours, and upon defluxions of the eyes.

Anaxilaüs makes a statement to the effect, that if the mamillæ[77] are rubbed with hemlock during virginity, they will always be hard and firm: but a better-ascertained fact is, that applied[78] to the mamillæ, it dries up the milk in women recently delivered; as also that, applied to the testes at the age of puberty, it acts most effectually as an antaphrodisiac.[79] As to those cases in which it is recommended to take it internally as a remedy, I shall, for my own part, decline to mention them. The most powerful hemlock is that grown at Susa, in Parthia, the next best being the produce of Laconia, Crete, and Asia.[80] In Greece, the hemlock of the finest quality is that of Megara, and next to it, that of Attica.

### CHAP. 96.—CRETHMOS AGRIOS: ONE REMEDY.

Crethmos agrios,[81] applied to the eyes, removes rheum; and, with the addition of polenta, it causes tumours to disappear.

### CHAP. 97.—MOLYBDÆNA: ONE REMEDY.

Molybdæna[82] also grows everywhere in the fields, a plant commonly known as "plumbago."[82] It has leaves like those of lapathum,[83] and a thick, hairy root. Chewed and applied to the

[77] A very dangerous use of it, Desfontaines thinks.

[78] Desfontaines says that it is still employed in various ways when the milk is in excess.

[79] By causing those organs to waste away.

[80] The province of Asia Minor.

[81] "Wild crethmos." Generally identified with the Crithmum maritimum of Linnæus, Small samphire, or sea fennel.

[82] Or "lead plant." Identified with the Plumbago Europæa of Linnæus, Leadwort, or French dittander.

[83] See B. xx. c. 85.

eye from time to time, it removes the disease called "plumbum,"[84] which affects that organ.

### CHAP. 98.—THE FIRST KIND OF CAPNOS, KNOWN ALSO AS CHICKEN'S FOOT: ONE REMEDY.

The first kind of capnos,[85] known also as "chicken's foot,"[86] is found growing on walls and hedges: it has very thin, straggling branches, with a purple blossom. It is used in a green state, and the juice of it disperses films upon the eyes; hence it is that it is employed as an ingredient in medicinal compositions for the eyes.

### CHAP. 99.—THE ARBORESCENT CAPNOS: THREE REMEDIES.

There is another kind[87] of capnos also, similar both in name and properties, but different in appearance. It is a branchy plant, is extremely delicate, has leaves like those of coriander, is of an ashy colour, and bears a purple flower: it grows in gardens, and amid crops of barley. Employed in the form of an ointment for the eyes, it improves the sight, producing tears in the same way that smoke does, to which, in fact, it owes its name. It has the effect also of preventing the eyelashes, when pulled out, from growing again.

### CHAP. 100.—THE ACORON OR AGRION: FOURTEEN REMEDIES.

The acoron[88] has leaves similar to those of the iris,[89] only narrower, and with a longer stalk; the roots of it are black, and not so veined, but in other respects are similar to those of the iris, have an acrid taste and a not unpleasant smell, and act as a carminative. The best roots are those grown in Pontus, the next best those of Galatia, and the next those of

[84] "Lead disease," apparently; livid spots on the eyelids, Hardouin thinks.

[85] Or "smoke-plant;" so called from its smell, which resembles that of smoke or soot.

[86] "Pedes gallinacei." Identified by Fée with the Corydalis digitata of Persoon, or else the C. bulbosa, or C. fabacea, several varieties of Fumitory.

[87] Identified by Fée with the Fumaria parvifolia of Lamarck, Small-leaved fumitory, or Earth-smoke. Other varieties of Fumitory have also been mentioned.

[88] The Acorus calamus of Linnæus, Sweet cane, or Sweet-smelling flag. See B. xii. c. 48.

[89] See B. xxi. c. 19.

Crete; but it is in Colchis, on the banks of the river Phasis, and in various other watery localities, that they are found in the greatest abundance. When fresh, they have a more powerful odour than when kept for some time: these of Crete are more blanched than the produce of Pontus. They are cut into pieces about a finger in length, and dried in leather bags[90] in the shade.

There are some authors who give the name of "acoron" to the root of the oxymyrsine;[91] for which reason also some prefer giving that plant the name of "acorion." It has powerful properties as a calorific and resolvent, and is taken in drink for cataract and films upon the eyes; the juice also is extracted, and taken for injuries inflicted by serpents.

CHAP. 101.—THE COTYLEDON: TWO VARIETIES OF IT: SIXTY-ONE REMEDIES.

The cotyledon[92] is a small herbaceous plant, with a diminutive, tender stem, and an unctuous leaf, with a concave surface like that of the cotyloïd cavity of the thigh. It grows in maritime and rocky localities, is of a green colour, and has a rounded root like an olive: the juice of it is remedial for diseases of the eyes.

There is another[93] kind also of the same plant, the leaves of which are of a dirty green[94] colour, larger than those of the other, and growing in greater numbers about the root, which is surrounded with them just as the eye is with the socket. These leaves have a remarkably astringent taste, and the stem is of considerable length, but extremely slender. This plant is employed for the same purposes as the iris and aizoüm.

CHAP. 102.—THE GREATER AIZOÜM, ALSO CALLED BUPHTHALMOS, ZOÖPHTHALMOS, STERGETHRON, HYPOGESON, AMBROSION, AMERIMNON, SEDUM MAGNUM, OR DIGITELLUS: THIRTY-SIX REMEDIES. THE SMALLER AIZOÜM, ALSO CALLED ERITHALES, TRITHALES, CHRYSOTHALES, ISOETES OR SEDUM: THIRTY-TWO REMEDIES.

Of the plant known as aizoüm[94*] there are two kinds; the

[90] "Utribus."

[91] See B. xv. c. 7.

[92] Identified with the Cotyledon umbilicus of Smith, *Flor. Brit.*, Navelwort, Kidney-wort, or Wall penny-wort.

[93] Identified by Littré with the Saxifraga media of Gouan; and by Feé with the Cotyledon serrata of Linnæus, Saw-toothed navel-wort.

[94] "Sordidis."

[94*] "Always living."

larger of which is sown in earthen pots. By some persons it is known as "buphthalmos,"[95] and by others as "zoöpthalmos," or else as "stergethron," because it forms an ingredient in the composition of philtres. Another name given to it is "hypogeson," from the circumstance that it generally grows upon the eaves[95*] of houses: some persons, again, give it the names of "ambrosion" and "amerimnon." In Italy it is known as "sedum magnum,"[96] "oculus," or "digitellus." The other kind[97] of aizoüm is more diminutive, and is known by some persons as "erithales"[98] and by others as "trithales," from the circumstance that it blossoms three times in the year. Other names given to it are "chrysothales"[99] and "isoëtes:"[1] but aizoüm is the common appellation of them both, from their being always green.

The larger kind exceeds a cubit in height, and is somewhat thicker than the thumb: at the extremity, the leaves are similar to a tongue in shape, and are fleshy, unctuous, full of juice, and about as broad as a person's thumb. Some are bent downwards towards the ground, while others again stand upright, the outline of them resembling an eye in shape. The smaller kind grows upon walls, old rubbish of houses, and tiled roofs; it is branchy from the root, and covered with leaves to the extremity. These leaves are narrow, pointed, and juicy: the stem is a palm in height, and the root is never used.

### CHAP. 103.—THE ANDRACHLE AGRIA OR ILLECEBRA: THIRTY-TWO REMEDIES.

A similar plant is that known to the Greeks by the name of "andrachle agria,"[2] and by the people of Italy as the "illece-

[95] "Bull's eye," "living eye," and "love exciter." The Sempervivum tectorum of Linnæus, common Houseleek or Sengreene.

[95*] Called "geisa" in Greek.

[96] "Great houseleek," "eye," or "little finger."

[97] Fée identifies it with the Sedum ochroleucum of Sibthorp; Sprengel with the Sedum altissimum, and others with the Sedum acre, varieties of Wall pepper, or Stone-crop. Littré gives the Sedum amplexicaule of Decandolle.

[98] "Spring blossoming."

[99] "Blossoming like gold."

[1] "The same all the year."

[2] "Wild andrachle." Desfontaines identifies it with the Sedum stellatum; Fée, though with some hesitation, with the Sedum reflexum of Linnæus, the Sharp-pointed stone-crop, or Prick-madam. The Sedum, however, is of a caustic and slightly corrosive nature, and not edible; in which it certainly differs from the Andrachle agria of our author. Holland calls it "Wild purslain."

bra." Its leaves, though small, are larger than those of the last-named plant, but growing on a shorter stem. It grows in craggy localities, and is gathered for use as food. All these plants have the same properties, being cooling and astringent. The leaves, applied topically, or the juice, in form of a liniment, are curative of defluxions of the eyes: this juice too acts as a detergent upon ulcers of the eyes, makes new flesh, and causes them to cicatrize; it[3] cleanses the eyelids also of viscous matter. Applied to the temples, both the leaves and the juice of these plants are remedial for head-ache; they neutralize the venom also of the phalangium; and the greater aizoüm, in particular, is an antidote to aconite. It is asserted, too, that those who carry this last plant about them will never be stung by the scorpion.

These plants are curative of pains in the ears; which is the case also with juice of henbane, applied in moderate quantities, of achillea,[4] of the smaller centaury and plantago, of peucedanum in combination with rose-oil and opium, and of acoron[5] mixed with rose-leaves. In all these cases, the liquid is made warm, and introduced into the ear with the aid of a syringe.[6] The cotyledon is good, too, for suppurations in the ears, mixed with deer's marrow made hot. The juice of pounded root of ebulum[7] is strained through a linen cloth, and then left to thicken in the sun: when wanted for use, it is moistened with oil of roses, and made hot, being employed for the cure of imposthumes of the parotid glands. Vervain and plantago are likewise used for the cure of the same malady, as also sideritis,[8] mixed with stale axle-grease.

### CHAP. 104.—A REMEDY FOR DISEASES OF THE NOSTRILS.

Aristolochia,[8*] mixed with cyperus,[9] is curative of polypus of the nose.[10]

### CHAP. 105.—REMEDIES FOR DISEASES OF THE TEETH.

The following are remedies for diseases of the teeth: root

[3] This is probably the meaning of "palpebras deglutinat."
[4] See c. 19 of this Book.
[5] See c. 100 of this Book.
[6] "Strigil." This in general means a "body-scraper;" but it most probably signifies a "syringe," in the present instance. See B. xxix. c. 39, and B. xxxi c. 47.
[7] See B. xxiv. c. 35.
[8] See c. 19 of this Book.
[8*] See c. 54 of this Book.
[9] See B. xxi. cc. 69, 70.
[10] "Ozænam."

of panaces,[11] chewed, that of the chironion in particular, and juice of panaces, used as a collutory; root, too, of henbane, chewed with vinegar, and root of polemonia.[12] The root of plantago is chewed for a similar purpose, or the teeth are rinsed with a decoction of the juice mixed with vinegar. The leaves, too, are said to be useful for the gums, when swollen with sanious blood, or if there are discharges of blood therefrom. The seed, too, of plantago is a cure for abscesses in the gums, and for gum-boils. Aristolochia has a strengthening effect upon the gums and teeth; and the same with vervain, either chewed with the root of that plant, or boiled in wine and vinegar, the decoction being employed as a gargle. The same is the case, also, with root of cinquefoil, boiled down to one third, in wine or vinegar; before it is boiled, however, the root should be washed in sea or salt water: the decoction, too, must be kept a considerable time in the mouth. Some persons prefer cleaning the teeth with ashes of cinquefoil.

Root of verbascum[13] is also boiled in wine, and the decoction used for rinsing the teeth. The same is done too with hyssop and juice of peucedanum, mixed with opium; or else the juice of the root of anagallis,[14] the female plant in particular, is injected into the nostril on the opposite side to that in which the pain is felt.

### CHAP. 106.—ERIGERON, PAPPUS, ACANTHIS, OR SENECIO: EIGHT REMEDIES.

Erigeron[15] is called by our people "senecio." It is said that if a person, after tracing around this plant with an implement of iron, takes it up and touches the tooth affected with it three times, taking care to spit each time on the ground, and then replaces it in the same spot, so as to take root again, he will never experience any further pain in that tooth. This plant has just the appearance and softness of trixago,[16] with a number of small reddish-coloured stems: it is found growing upon walls, and the tiled roofs of houses. The Greeks have

[11] See c. 11 of this Book.
[12] See c. 28 of this Book.
[13] See c. 73 of this Book.
[14] See c. 92 of this Book.
[15] Identified by Desfontaines with the Senecio Jacobæa of Linnæus, Common ragwort. Fée identifies it with the Senecio vulgaris of Linnæus, our Groundsel. They are both destitute of medicinal properties.
[16] See B. xxiv. c. 80.

given it the name of "erigeron,"[17] because it is white in spring. The head is divided into numerous downy filaments, which resemble those of the thorn,[18] protruding from between the divisions of the head: hence it is that Callimachus has given it the name of "acanthis,"[19] while others, again, call it "pappus."[20]

After all, however, the Greek writers are by no means agreed as to this plant; some say, for instance, that it has leaves like those of rocket, while others maintain that they resemble those of the robur, only that they are considerably smaller. Some, again, assert that the root is useless, while others aver that it is beneficial for the sinews, and others that it produces suffocation, if taken in drink. On the other hand, some have prescribed it in wine, for jaundice and all affections of the bladder, heart, and liver, and give it as their opinion that it carries off gravel from the kidneys. It has been prescribed, also, by them for sciatica, the patient taking one drachma in oxymel, after a walk; and has been recommended as extremely useful for griping pains in the bowels, taken in raisin wine. They assert, also, that used as an aliment with vinegar, it is wholesome for the thoracic organs, and recommend it to be grown in the garden for these several purposes.

In addition to this, there are some authorities to be found, which distinguish another variety of this plant, but without mentioning its peculiar characteristics. This last they recommend to be taken in water, to neutralize the venom of serpents, and prescribe it to be eaten for the cure of epilepsy. For my own part, however, I shall only speak of it in accordance with the uses made of it among us Romans, uses based upon the results of actual experience. The down of this plant, beaten up with saffron and a little cold water, is applied to defluxions of the eyes; parched with a little salt, it is employed for the cure of scrofulous sores.

### CHAP. 107.—THE EPHEMERON: TWO REMEDIES.

The ephemeron[21] has leaves like those of the lily, but smaller;

[17] "Εαρι γέρων, "aged," or "hoary in spring."

[18] "Spinæ." He probably uses a wrong term, and means "thistle."

[19] It may possibly have been so called from the Acanthis, or goldfinch, that bird being fond of groundsel.

[20] "Thistle-down." If Pliny is speaking of groundsel, he is wrong in his assertion that it turns white, or in other words, goes to seed, in spring.

[21] Sprengel identifies it with the Ornithogalum stachyoides; but that

a stem of the same height, a blue flower, and a seed of which no use is made. The root is single, about the thickness of one's finger, and an excellent remedy for diseases of the teeth; for which purpose it is cut up in pieces, and boiled in vinegar, the decoction being used warm as a collutory. The root, too, is employed by itself to strengthen the teeth, being inserted for the purpose in those that are hollow or carious.

Root of chelidonia[22] is also beaten up with vinegar, and kept in the mouth. Black hellebore is sometimes inserted in carious teeth; and a decoction of either of these last-mentioned plants, in vinegar, has the effect of strengthening loose teeth.

### CHAP. 108 —THE LABRUM VENEREUM: ONE REMEDY.

Labrum Venereum[23] is the name given to a plant that grows in running streams.[24] It produces a small worm,[25] which is crushed by being rubbed upon the teeth, or else enclosed in wax and inserted in the hollow of the tooth. Care must be taken, however, that the plant, when pulled up, does not touch the ground.

### CHAP. 109.—THE BATRACHION, RANUNCULUS, OR STRUMUS; FOUR VARIETIES OF IT: FOURTEEN REMEDIES.

The plant known to the Greeks as "batrachion,"[26] we call ranunculus.[27] There are four varieties of it,[28] one of which

has no blue flower, and the same is the case with many other plants that have been suggested as its synonym. Fée suggests the Convallaria verticillata of Linnæus, the whorl-leaved Solomon's seal; as to which, however, there is the same difficulty in reference to the flower. Holland calls it the "May lily," otherwise the Lily of the valley, the Convallaria Maialis; and this is the synonym suggested by Fuchsius. Littré gives the Convallaria multiflora of Linnæus.

[22] See c. 50 of this Book.

[23] Or "Venus' bath." Identified by Littré with the Dipsacus silvestris of Linnæus, and by Fée with the Dipsacus fullonum of Linnæus, the Teazel, or Fuller's thistle. It received its Roman name from the form of the leaves, which are channelled, and curved at the edges.

[24] This is entirely erroneous; he may possibly have mistranslated some author, who has stated that the rain-water settles in reservoirs formed by the leaves.

[25] He alludes to the larvæ of the Curculio or weevil, which are found in the head of the Dipsacus, and many other plants. See B. xxvii. c. 62, and B. xxx. c. 8.

[26] "Frog-plant."

[27] "Little frog." Called "Crow-foot" by us.

[28] Sprengel identifies it with the Ranunculus Seguieri, Fée with the R. Asiaticus, also a native of Greece.

has leaves somewhat thicker than those of coriander, nearly the size of those of the mallow, and of a livid hue: the stem of the plant is long and slender, and the root white; it grows on moist and well-shaded embankments. The second[29] kind is more foliated than the preceding one, the leaves have more numerous incisions, and the stems of the plant are long. The third[30] variety is smaller than the others, has a powerful smell, and a flower of a golden colour. The fourth[31] kind is very like the one last mentioned, but the flower is milk-white.

All these plants have caustic properties: if the leaves are applied unboiled, they raise blisters like those caused by the action of fire; hence it is that they are used for the removal of leprous spots, itch-scabs, and brand marks upon the skin. They form an ingredient also in all caustic preparations, and are applied for the cure of alopecy, care being taken to remove them very speedily. The root, if chewed for some time, in cases of tooth-ache, will cause[32] the teeth to break; dried and pulverized, it acts as a sternutatory.

Our herbalists give this plant the name of "strumus," from the circumstance of its being curative of strumous[33] sores and inflamed tumours, for which purpose a portion of it is hung up in the smoke. It is a general belief, too, with them, that if it is replanted, the malady so cured will reappear[34]—a criminal practice, for which the plantago is also employed. The juice of this last-mentioned plant is curative of internal ulcerations of the mouth; and the leaves and root are chewed for a similar

[29] Identified by Desfontaines with the Ranunculus hirsutus, or philonotis. Fée, with Hardouin, considers it to be the same as the Apiastrum of B. xx. c. 45, and identifies it with the Ranunculus Sardoüs of Crantz, the plant probably which produces a contraction of the mouth, rendered famous as the "Sardonic grin," and more commonly known as the Ranunculus sceleratus, Apium risus, or Apium Sardoüm, "Laughing parsley," or "Sardinian parsley."

[30] Identified by Sprengel and Desfontaines with the Ranunculus repens, or Creeping crow-foot; but by Fée, with the Ranunculus muricatus of Linnæus.

[31] Identified by Desfontaines with the Ranunculus aconitifolius; by Fée with the Ranunculus aquatilis of Linnæus, the Water crowfoot. The Ranunculi are all active poisons.

[32] A fabulous assertion, probably, and it is very doubtful if any one ever made the trial of its efficacy.

[33] Or scrofula.

[34] See B. xxi. c. 83, and B. xxvi. c. 5.

purpose, even when the mouth is suffering from defluxions. Cinquefoil effects the cure of ulcerations and offensive breath; psyllium[35] is used also for ulcers of the mouth.

CHAP. 110.—REMEDIAL PREPARATIONS FOR OFFENSIVE BREATH: TWO KINDS OF THEM.

We shall also here make mention of certain preparations for the cure of offensive breath—a most noisome inconvenience. For this purpose, leaves of myrtle and lentisk are taken in equal proportions, with one half the quantity of Syrian nut-galls; they are then pounded together and sprinkled with old wine, and the composition is chewed in the morning. In similar cases, also, ivy berries are used, in combination with cassia and myrrh; these ingredients being mixed, in equal proportions, with wine.

For offensive odours of the nostrils, even though attended with carcinoma, the most effectual remedy is seed of dracontium[36] beaten up with honey. An application of hyssop has the effect of making bruises disappear. Brand marks[37] in the face are healed by rubbing them with mandragora.[38]

SUMMARY.—Remedies, narratives, and observations, twelve hundred and ninety-two.

ROMAN AUTHORS QUOTED.—C. Valgius,[39] Pompeius Lenæus,[40] Sextius Niger[41] who wrote in Greek, Julius Bassus[42] who wrote in Greek, Antonius Castor,[43] Cornelius Celsus,[44] Fabianus.[45]

FOREIGN AUTHORS QUOTED.—Theophrastus,[46] Apollodorus,[47] Democritus,[48] Juba,[49] Orpheus,[50] Pythagoras,[51] Mago,[52] Menan-

35 See c. 90 of this Book.
36 See B. xxiv. cc. 91, 93.
37 "Stigmata."
38 See c. 94 of this Book.
39 See end of B. xx.
40 See end of B. xiv.
41 See end of B. xii.
42 See end of B. xx.
43 See end of B. xx.
44 See end of B. vii.
45 For Fabianus Papirius, see end of B. ii.; for Fabianus Sabinus, see end of B. xviii.
46 See end of B. iii.
47 See end of B. xi.
48 See end of B. ii.
49 See end of B. v.
50 See end of B. xx.
51 See end of B. ii.
52 See end of B. viii.

der[53] who wrote the "Biochresta," Nicander,[54] Homer, Hesiod,[55] Musæus,[56] Sophocles,[57] Xanthus,[58] Anaxilaüs.[59]

MEDICAL AUTHORS QUOTED.—Mnesitheus,[60] Callimachus,[61] Phanias[62] the physician, Timaristus,[63] Simus,[64] Hippocrates,[65] Chrysippus,[66] Diocles,[67] Ophelion,[68] Heraclides,[69] Hicesius,[70] Dionysius,[71] Apollodorus[72] of Citium, Apollodorus[73] of Tarentum, Praxagoras,[74] Plistonicus,[75] Medius,[76] Dieuches,[77] Cleophantus,[78] Philistion,[79] Asclepiades,[80] Crateuas,[81] Petronius Diodotus,[82] Iollas,[83] Erasistratus,[84] Diagoras,[85] Andreas,[86] Mnesides,[87] Epicharmus,[88] Damion,[89] Sosimenes,[90] Tlepolemus,[91] Metrodorus,[92] Solon,[93] Lycus,[94] Olympias[95] of Thebes, Philinus,[96] Petrichus,[97] Micton,[98] Glaucias,[99] Xenocrates.[1]

53 See end of B. xix.
54 See end of B. viii.
55 See end of B. vii.
56 See end of B. xxi.
57 See end of B. xxi.
58 A Lydian historian, anterior to Herodotus, of whom little is known with any degree of certainty. He probably flourished in the earlier part of the fifth century B.C.
59 See end of B. xxi.
60 See end of B. xxi.
61 See end of B. iv.
62 See end of B. xxi.
63 See end of B. xxi.
64 See end of B. xxi.
65 See end of B. vii.
66 See end of B. xx.
67 See end of B. xx.
68 See end of B. xx.
69 See end of B. xii.
70 See end of B. xv.
71 See end of B. xii.
72 See end of B. xx.
73 See end of B. xx.
74 See end of B. xx.
75 See end of B. xx.
76 See end of B. xx.
77 See end of B. xx.
78 See end of B. xx.
79 See end of B. xx.
80 See end of B. vii.
81 See end of B. xx.
82 See end of B. xx.
83 See end of B. xii.
84 See end of B. xi.
85 See end of B. xii.
86 See end of B. xx.
87 See end of B. xii.
88 See end of B. xx.
89 See end of B. xx.
90 See end of B. xx.
91 See end of B. xx.
92 See end of B. xx.
93 See end of B. xx.
94 See end of B. xii.
95 See end of B. xx.
96 See end of B. xx.
97 See end of B. xix.
98 See end of B. xx.
99 See end of B. xx.
1 See end of B. xx.

# BOOK XXVI.

## A CONTINUATION OF THE REMEDIES DERIVED FROM PLANTS, CLASSIFIED ACCORDING TO PARTICULAR DISEASES.

### CHAP. 1. (1.)—NEW FORMS OF DISEASE.

THE face of man has recently been sensible of new forms of disease, unknown[1] in ancient times, not only to Italy, but to almost the whole of Europe. Still, however, they have not as yet extended to the whole of Italy, nor have they made any very great inroads in Illyricum, Gaul, or Spain, or indeed any other parts, to so great an extent as in Rome and its environs. Though unattended with pain, and not dangerous to life, these diseases are of so loathsome a nature, that any form of death would be preferable to them.

### CHAP. 2.—THE NATURE OF LICHEN.

The most insupportable of all these diseases is the one which, after its Greek appellation, is known to us as "lichen."[1] In consequence, however, of its generally making its first appearance at the chin, the Latins, by way of joke, originally—so prone are mankind to make a jest of the misfortunes of others—gave it the name of "mentagra;"[2] an appellation which has since become established in general use. In many cases, however, this disease spreads over the interior of the mouth, and takes possession of the whole face, with the sole exception of the eyes; after which, it passes downwards to the neck, breast, and hands, covering them with foul furfuraceous eruptions.

### CHAP. 3.—AT WHAT PERIOD LICHEN FIRST MADE ITS APPEARANCE IN ITALY.

This curse was unknown to the ancients,[3] and in the times of our fathers even, having first entered Italy in the middle of

[1] Probably as Littré suggests, a peculiar form of elephantiasis, the leprosy of the middle ages.

[2] The "chin disease:" from "mentum," the "chin." It is difficult to detect the joke which has here incurred the censure of our author.

[3] Meaning the people of Italy.

the reign of the Emperor Tiberius[4] Claudius Cæsar; where it was introduced from Asia,[4a] in which country it had lately made[5] its appearance, by a member of the equestrian order at Rome, a native of Perusium, secretary to the quæstor. The disease, however, did not attack either females or slaves,[6] nor yet the lower orders, or, indeed, the middle classes, but only the nobles, being communicated even by the momentary contact requisite for the act of salutation.[7] Many of those who persevered in undergoing a course of remedial treatment, though cured of the disease, retained scars upon the body more hideous even than the malady itself; it being treated with cauteries, as it was certain to break out afresh, unless means were adopted for burning it out of the body by cauterizing to the very bone.

Upon this occasion several physicians repaired to Rome from Egypt, that fruitful parent of maladies of this nature, men who devoted themselves solely to this branch of medical practice; and very considerable were the profits they made. At all events, it is a well-known fact that Manilius Cornutus, a personage of prætorian rank, and legatus of the province of Aquitania, expended no less a sum than two hundred thousand[8] sesterces upon his cure.

It is much more frequently, on the other hand, that we hear of new forms of diseases attacking the lower orders; a singular fact, and one quite unequalled for the marvellous phænomena which sometimes attend these outbreaks. Thus, for instance, we find an epidemic suddenly making its appearance in a certain country, and then confining itself, as though it had made its election so to do, to certain parts of the body, certain ages, and even certain pursuits in life. In the same way, too, while

[4] It is somewhat difficult to say whether Tiberius, the predecessor, or Claudius, the successor of Caligula, is meant; most probably the latter, as the former's reign would have been in the times of "our fathers."

[4a] Asia Minor.

[5] "Cum apparuisset." He is probably wrong here, for leprosy was known in Asia from the very earliest times.

[6] This assertion as to the slaves and lower orders is somewhat doubtful, though it is very possible that the diet and habits of the higher orders may have predisposed them more particularly for the attacks of the diseases.

[7] "Osculi," "kissing;" a nauseous and silly practice, still adhered to, between bearded men even, in many parts of Europe.

[8] Upwards of £1500.

one class of diseases attacks the young, another confines itself to adults; while one malady extends itself only to the higher classes, another is felt exclusively by the poor.

### CHAP. 4.—CARBUNCLE.

We find it stated in the Annals, that it was in the censorship[9] of L. Paulus and Q. Marcius that carbuncle[10] was first introduced into Italy, a malady which till then had confined itself solely to the province of Gallia Narbonensis. In the year in which I am writing these lines, two persons of consular rank have died of this disease, Julius Rufus[11] and Q. Lecanius Bassus;[12] the former in consequence of an incision unskilfully made by his medical attendants, the latter through a wound upon the thumb of the left hand by pricking a carbuncle with a needle, a wound so small originally as to be hardly perceptible.

This disease makes its appearance in the more hidden[13] parts of the human body, and mostly beneath the tongue. It originally has the form of a hard, red, pimple, with a blackish head mostly, though sometimes of a livid colour. It produces tension of the flesh, but unattended with swelling, pain, or any itching sensation; indeed, the only symptom that accompanies it is a confirmed drowsiness, which overpowers the patient, and carries him off in the course of three days. Sometimes, however, it is accompanied with shuddering, and small pustules about the sore; and occasionally, though but rarely, with fever. When these symptoms extend to the fauces and œsophagus, death ensues with the greatest rapidity.

### CHAP. 5.—ELEPHANTIASIS.

We have already[14] stated that elephantiasis[15] was unknown

[9] A.U.C. 590.

[10] "Carbunculus." A malignant pustule, accompanied with swelling and ending with gangrene, is still known by this name, but it does not manifest any particular preference for the mouth and tongue. Fée says that carbuncle was recently (1833) endemic in Provence, the ancient Gallia Narbonensis, for which reason it had received the name of "Charbon Provençal."

[11] Consul, A.U.C. 819.

[12] Consul, A.U.C. 816.

[13] Judging from this symptom, Dalechamps says that it looks more like chancre than carbuncle.

[14] In B. XX. c. 52.

[15] Supposed, as Pliny says, to have originally come from Upper Egypt.

in Italy before the time of Pompeius Magnus. This malady, too, like those already mentioned, mostly makes its first appearance in the face. In its primary form it bears a considerable resemblance to a small lentil upon the nose; the skin gradually dries up all over the body, is marked with spots of various colours, and presents an unequal surface, being thick in one place, thin in another, indurated every here and there, and covered with a sort of rough scab. At a later period, the skin assumes a black hue, and compresses the flesh upon the bones, the fingers and toes becoming swollen.

This disease was originally peculiar to Egypt. Whenever it attacked the kings of that country, it was attended with peculiarly fatal effects to the people, it being the practice to temper their sitting-baths with human blood, for the treatment of the disease. As for Italy, however, its career was very soon cut short: the same was the case, too, with the disease known as "gemursa"[16] to the ancients, a malady which made its appearance between the toes, and the very name of which is now buried in oblivion.

## CHAP. 6.—COLIC.

It is a remarkable fact that some diseases should disappear from among us, while others, again, should continue to prevail, colic[17] for example. It was only in the reign of Tiberius Cæsar that this malady made its appearance in Italy, the emperor himself being the first to be attacked by it; a circumstance which produced considerable mystification throughout the City, when it read the edict issued by that prince excusing his inattention to public business, on the ground of his being laid up with a disease, the very name of which was till then unknown. To what cause are we to attribute these various diseases, or how is it that we have thus incurred the anger of the gods? Was it deemed too little for man to be exposed to

Lucretius, B. vi. l. 1111, *et seq.*, attributes it to the water of the Nile. It is but rarely known in Europe.

[16] Fée thinks that this may have been a sort of abscess similar to those between the fingers which are known as *fourches* by the French, and by medical men as "Aposthema phalangum." Gruner considers it to be a sort of Elephantiasis, and Triller identifies it with the disease called *Gumretha* by the Talmudists.

[17] "Colum." Fée takes this to be Schirrus of the colon.

fixed and determinate classes of maladies, already more than three hundred in number, that he must have new forms of disease to alarm him as well? And then, in addition to all these, not less in number are the troubles and misfortunes which man brings upon himself!

The remedies which I am here describing, are those which were universally employed in ancient times, Nature herself, so to say, making up the medicines: indeed, for a long time these were the only medicines employed.

(2.) Hippocrates,[18] it is well known, was the first to compile a code of medical precepts, a thing which he did with the greatest perspicuity, as his treatises, we find, are replete with information upon the various plants. No less is the information which we gain from the works of Diocles[19] of Carystus, second only in reputation, as well as date, to Hippocrates. The same, too, with reference to the works of Praxagoras, Chrysippus, and, at a later period, Erasistratus[20] of Cos. Herophilus[21] too, though himself the founder of a more refined system of medicine, was extremely profuse of his commendations of the use of simples. At a later period, however, experience, our most efficient instructor in all things, medicine in particular, gradually began to be lost sight of in mere words and verbiage: it being found, in fact, much more agreeable to sit in schools, and to listen to the talk of a professor, than to go a simpling in the deserts, and to be searching for this plant or that at all the various seasons of the year.

### CHAP. 7. (3.)—THE NEW SYSTEM OF MEDICINE: ASCLEPIADES THE PHYSICIAN.

Still, however, the ancient theories remained unshaken, based as they were upon the still existing grounds of universally acknowledged experience; until, in the time of Pompeius Magnus, Asclepiades,[22] a professor of rhetoric, who considered himself not sufficiently repaid by that pursuit, and whose readiness and sagacity rendered him better adapted for any other than forensic practice, suddenly turned his attention to the medical art. Having never practised medicine, and being totally unacquainted with the nature of remedies—a

[18] See B. xxix. c. i.
[19] See end of B. xx.
[20] See B. xxix. c. 3.
[21] See B. xxix. c. 5.
[22] See end of B. vii.

knowledge only to be acquired by personal examination and actual experience—as a matter of course, he was obliged to renounce all previously-established theories, and to trust rather to his flowing periods and his well-studied discourses, for gaining an influence upon the minds of his audience.

Reducing the whole art of medicine to an estimation solely of primary causes, he made it nothing but a merely conjectural art, and established it as his creed, that there are five great principles of treatment for all diseases in common; diet, use or non-use of wine, frictions, exercise on foot, and exercise[23] in a carriage or on horseback. As every one perceived that each of these methods of treatment lay quite within his own reach, all, of course, with the greatest readiness gave their assent, willing as they were to believe that to be true which was so easy of acquisition; and hence it was that he attracted nearly all the world about him, as though he had been sent among mankind on a special mission from heaven.

### CHAP. 8. — THE CHANGES EFFECTED BY ASCLEPIADES IN THE PRACTICE OF MEDICINE.

In addition to this, he had a wonderful tact in gaining the full confidence of his patients: sometimes he would make them a promise of wine, and then seize the opportune moment for administering it, while on other occasions, again, he would prescribe cold water: indeed, as Herophilus, among the ancients, had been the first to enquire into the primary causes of disease, and Cleophantus had brought into notice the treatment of diseases by wine, so did Asclepiades, as we learn from M. Varro, prefer to be indebted for his surname and repute to the extensive use made by him of cold water as a remedy. He employed also various other soothing remedies for his patients; thus, for instance, it was he that introduced swinging beds, the motion of which might either lull the malady, or induce sleep, as deemed desirable. It was he, too, that brought baths into such general use,—a method of treatment that was adopted with the greatest avidity—in addition to numerous other modes of treatment of a pleasant and soothing nature. By these means he acquired a great professional reputation, and a no less extended fame; which

[23] "Gestationes;" exercise on horseback, in a litter, or in a carriage drawn by horses.

was very considerably enhanced by the following incident: meeting the funeral procession of a person unknown to him, he ordered the body to be removed from the funeral pile[24] and carried home, and was thus the means of saving his life. This circumstance I am the more desirous to mention, that it may not be imagined that it was on slight grounds only that so extensive a revolution was effected in the medical art.

There is, however, one thing, and one thing only, at which we have any ground for indignation,—the fact, that a single individual, and he belonging to the most frivolous nation[25] in the world, a man born in utter indigence, should all on a sudden, and that, too, for the sole purpose of increasing his income, give a new code of medical laws to mankind; laws, however, be it remembered, which have been annulled by numerous authorities since his day. The success of Asclepiades was considerably promoted by many of the usages of ancient medicine, repulsive in their nature, and attended with far too much anxiety: thus, for instance, it was the practice to cover up the patient with vast numbers of clothes, and to adopt every possible method of promoting the perspiration; to order the body to be roasted before a fire; or else to be continually sending the patient on a search for sunshine, a thing hardly to be found in a showery climate like that of this city of ours; or rather, so to say, of the whole of Italy, so prolific[25*] as it is of fogs and rain.[26] It was to remedy these inconveniences, that he introduced the use of hanging baths,[27] an invention that was found grateful to invalids in the very highest degree.

In addition to this, he modified the tortures which had hitherto attended the treatment of certain maladies; as in quinzy for instance, the cure of which before his time had been usually effected by the introduction of an instrument[28] into the throat. He condemned, and with good reason, the indiscriminate use of emetics, which till then had been resorted to in a

[24] See B. vii. c. 37. Apuleius gives the story at considerable length, in the Florida, B. iv.

[25] Asia Minor. Asclepiades was a native of Prusa in Bithynia.

[25*] We adopt Sillig's suggestion, and read "nimborum altrice," the word "imperatrice" being evidently out of place. The climate of Italy seems to have changed very materially since his day.

[26] See B. ii. c. 51. [27] See B. ix. c. 79. [28] "Organo."

most extraordinary degree. He disapproved also of the practice of administering internally potions that are naturally injurious to the stomach, a thing that may truthfully be pronounced of the greater part of them. Indeed it will be as well to take an early opportunity of stating what are the medicaments which act beneficially upon the stomach.

CHAP. 9. (4).—REMARKS IN DISPRAISE OF THE PRACTICES OF MAGIC.

But above all things, it was the follies of magic more particularly that contributed so essentially to his success—follies which had been carried to such a pitch as to destroy all confidence in the remedial virtues of plants. Thus, for instance, it was stoutly maintained that by the agency of the plant æthiopis[29] rivers and standing waters could be dried up, and that by the very touch[30] * * * * all bars and doors might be opened: that if the plant achæmenis[31] were thrown into the ranks of the enemy it would be certain to create a panic and put them to flight: that latace[32] was given by the Persian kings to their ambassadors, to ensure them an abundant supply of everything wherever they might happen to be: with numerous other reveries of a similar nature. Where, I should like to know, were all these plants, when the Cimbri and Teutones brought upon us the horrors of warfare with their terrific yells? or when Lucullus defeated, with a few legions, so many kings who ruled over the Magi?[33] Why is it too that the Roman generals have always made it their first care in warfare to make provision for the victualling of their troops? And how was it that at Pharsalia the troops of Cæsar were suffering from famine, if an abundance of everything could have been ensured by the fortunate possession of a single plant? Would it not have been better too for Scipio Æmilianus to have opened the gates of Carthage by touching them with a herb, than to have taken so many years to batter down its bulwarks with his engines of war?

Turning to the present moment, let them, by the agency of the herb meroïs,[34] dry up the Pomptine[35] Marshes, if they can,

[29] See B. xxiv. c. 102.

[30] We agree with Pintianus that the name of some plant here has been lost, the word "condiendis" making no sense.

[31] See B. xxiv. c. 102.

[32] Some plant as fictitious as the others here mentioned.

[33] See B. xxx. c. i. [34] See B. xxiv. c. 102. [35] See B. iii. c. 9.

and by these means restore so much territory to the regions of Italy in the neighbourhood of our city. In the works, too, of Democritus, already mentioned,[36] we find a recipe for the composition of a medicament which will ensure the procreation of issue, both sure to be good and fortunate.—What king of Persia, pray, ever obtained that blessing? It really would be a marvellous fact that human credulity, taking its rise originally in the very soundest of notions, should have ultimately arrived at such a pitch as this, if the mind of man understood, under any circumstances, how to keep within the bounds of moderation; and if the very system of medicine thus introduced by Asclepiades, had not been carried to a greater pitch of extravagance than the follies of magic even, an assertion which I shall prove on a more appropriate occasion.[37]

Such, however, is the natural constitution of the human mind, that, be the circumstances what they may, commencing with what is necessary it speedily arrives at the point of launching out in excess.

We will now resume our account of the medicinal properties of the plants mentioned in the preceding Book, adding to our description such others as the necessities of the case may seem to require.

### CHAP. 10.—LICHEN: FIVE REMEDIES.

As to the treatment of lichen, so noisome a disease as it is, we shall here give a number of additional remedies for it, gathered from all quarters, although those already described are by no means few in number. For the cure of lichen plantago is used, pounded, cinquefoil also, root of albucus[38] in combination with vinegar, the young shoots of the fig-tree boiled in vinegar, or roots of marsh-mallow boiled down to one-fourth with glue and vinegar. The sores are rubbed also with pumice, and then fomented with root of rumex[39] bruised in vinegar, or with scum of viscus[40] kneaded up with lime. A decoction, too, of tithymalos[41] with resin is highly esteemed for the same purpose.

But to all these remedies the plant known as "lichen," from

[36] In B. xxiv. c. 102.
[37] In B. xxix. c. 5.
[38] See B. xxi. c. 68.
[39] See B. xx. c. 85.
[40] "Flos visci."
[41] See c. 39 of this Book.

its efficacy as a cure, is held in preference. It is found growing among rocks, and has a single broad leaf[42] near the root, and a single long stem, with small leaves hanging from it. This plant has the property also of effacing brand marks, being beaten up with honey for that purpose. There is another kind[43] of lichen also, which adheres entirely to rocks, like moss, and which is equally used as a topical application. The juice of it, dropt into wounds, or applied to abscesses, has the property of arresting hæmorrhage: mixed with honey, it is curative of jaundice, the face and tongue being rubbed with it. Under this mode of treatment, the patient is recommended to wash in salt water, to anoint himself with oil of almonds, and to abstain from garden vegetables. For the cure of lichen, root of thapsia[44] is also used, bruised in honey.

### CHAP. 11.—QUINZY.

For the treatment of quinzy, we find argemonia[45] recommended, in wine; a decoction of hyssop, boiled with figs, used as a gargle; peucedanum,[46] with an equal proportion of sea-calf's rennet; proserpinaca,[47] beaten up in the pickle of the mæna[48] and oil, or else placed beneath the tongue; as also juice of cinquefoil, taken in doses of three cyathi. Used as a gargle, juice of cinquefoil is good for the cure of all affections of the fauces: verbascum,[49] too, taken in wine, is particularly useful for diseases of the tonsillary glands.

### CHAP. 12. (5.)—SCROFULA.

For the cure of scrofula[50] plantago is employed, chelidonia[51] mixed with honey and axle-grease, cinquefoil, and root of per-

[42] Identified by Fée with the Marchantia polymorpha of Linnæus, Common Marchantia, or Fountain liverwort, the male plant.

[43] Identified by Fée with the Marchantia stellata, Star-headed Marchantia, or Female fountain liverwort. Desfontaines takes it to be either the Marchantia conica, or the Peltidea canina. It must be remembered that the Marchantia is not a Lichen in the modern acceptation of the word, and that our Lichens are destitute of stem. Littré identifies it with the Lecanora parella.

[44] See B. xiii. c. 43.

[45] See B. xxv. c. 56.

[46] See B. xxv. c. 70.

[47] See B. xxvii. c. 104.

[48] See B. ix. c. 42.

[49] See B. xxv. c. 73.

[50] Fée remarks that none of the plants here mentioned are of any utility for the cure of scrofula.

[51] See B. xxv. c. 50.

solata[52]—this last being applied topically, and covered with the leaf of the plant—artemisia,[53] also, and an infusion of the root of mandragora[54] in water. The large-leaved sideritis,[55] cleft by the left hand with a nail, is worn attached as an amulet: but after the cure has been effected, due care must be taken to preserve the plant, in order that it may not be set again, to promote the wicked designs of the herbalists and so cause the disease to break out afresh; as sometimes happens in the cases already mentioned,[56] and others which I find stated, in reference to persons cured by the agency of artemisia or plantago.

Damasonion,[57] also known as alcea, is gathered at the summer solstice, and applied with rain-water, the leaves being beaten up, or the root pounded, with axle-grease, so as to admit, when applied, of being covered with a leaf of the plant. The same plan is adopted also for the cure of all pains in the neck, and tumours on all parts of the body.

### CHAP. 13.—THE PLANT CALLED BELLIS: TWO REMEDIES.

Bellis[58] is the name of a plant that grows in the fields, with a white flower somewhat inclining to red; if this is applied with artemisia,[59] it is said, the remedy is still more efficacious.

### CHAP. 14.—THE CONDURDUM.

The condurdum,[60] too, is a plant with a red blossom, which flowers at the summer solstice. Suspended from the neck, it

[52] See B. xxv. c. 66.

[53] See B. xxv. c. 36.

[54] See B. xxv. c. 94.

[55] See B. xxv. c. 19, where our author has confused the Achillea with the Sideritis; also c. 15, where he describes the Heraclion siderion. Fée identifies the Sideritis mentioned in B. xxv. c. 19, as having a square stem and leaves like those of the quercus, with the Stachys heraclea of modern botany. That mentioned in the same Chapter, as having a fetid smell, he identifies with the Phellandrium mutellina of Linnæus. The large-leaved Sideritis is, no doubt, the one mentioned as having leaves like those of the quercus. See the Note to B. xxv. c. 19.

[56] In B. xxi. c. 83, and B. xxv. c. 119.

[57] See B. xxv. c. 77.

[58] Probably the Bellis perennis of Linnæus, the Common daisy. Fée remarks, that it was probably unknown to the Greeks.

[59] See B. xxv. c. 36.

[60] Identified by Sprengel and Desfontaines with the Saponaria vaccaria, the Perfoliate soapwort. Other commentators have suggested the Valeriana rubra, but Fée thinks that its synonym has not been hitherto discovered.

arrests scrofula, they say: the same being the case also with vervain, in combination with plantago. For the cure of all diseases of the fingers, hangnails in particular, cinquefoil is used.

## CHAP. 15.—COUGH.

Of all diseases of the chest, cough is the one that is the most oppressive. For the cure of this malady, root of panaces[61] in sweet wine is used, and in cases where it is attended with spitting of blood, juice of henbane. Henbane, too, used as a fumigation, is good for cough; and the same with scordotis,[62] mixed with nasturtium and dry resin, beaten up with honey: employed by itself also, scordotis facilitates expectoration, a property which is equally possessed by the greater centaury, even where the patient is troubled with spitting of blood; for which last juice of plantago is very beneficial. Betony, taken in doses of three oboli in water, is useful for purulent or bloody expectorations: root also of persolata,[63] in doses of one drachma, taken with eleven pine-nuts; and juice of peucedanum.[64]

For pains in the chest, acoron[65] is remarkably useful; hence it is that it is so much used an ingredient in antidotes. For cough, daucus[66] and the plant scythice[67] are much employed, this last being good, in fact, for all affections of the chest, coughs, and purulent expectorations, taken in doses of three oboli, with the same proportion of raisin wine. The verbascum[68] too, with a flower like gold, is similarly employed.

(6.) This last-named plant is so remarkably energetic, that an infusion of it, administered in their drink, will relieve beasts of burden, not only when troubled with cough, but when broken-winded even—a property which I find attributed to gentian also. Root of cacalia[69] chewed, or steeped in wine, is good for cough as well as all affections of the throat. Five sprigs of hyssop, with two of rue and three figs, act detergently upon the thoracic organs and allay cough.

[61] See B. xxv. c. 11.
[62] See B. xxv. c. 27.
[63] See B. xxv. c. 66.
[64] See B. xxv. c. 70.
[65] See B. xxv. c. 100.
[66] See B. xxv. c. 64.
[67] See B. xxii. c. 11, and B. xxv. c. 43. Our Liquorice probably, which, Fée remarks, as also figs and hyssop, has maintained its ancient reputation as a pectoral.
[68] See B. xxv. c. 73.
[69] See B. xxv. c. 85.

CHAP. 16.—BECHION, OTHERWISE KNOWN AS ARCION, CHAMÆLEUCE OR TUSSILAGO: THREE REMEDIES.

Bechion[70] is known also as tussilago: there are two kinds of it. Wherever it is found growing wild, it is generally thought that there is a spring of water below, and it is looked upon as a sure sign that such is the case, by persons in search[71] of water. The leaves are somewhat larger than those of ivy, and are some five or seven in number, of a whitish hue beneath, and a pale green on the upper surface. The plant is destitute of stem, blossom, and seed, and the root is very diminutive. Some persons are of opinion that this bechion is identical with the arcion, known also as the "chamæleuce."[72] The smoke[73] of this plant in a dry state, inhaled by the aid of a reed and swallowed, is curative, they say, of chronic cough; it is necessary, however, at each inhalation to take a draught of raisin wine.

CHAP. 17.—THE BECHION, KNOWN ALSO AS SALVIA: FOUR REMEDIES.

There is another bechion[74] also, known to some persons as "salvia,"[75] and bearing a strong resemblance to verbascum. This plant is triturated, and the juice strained off and taken warm for cough and for pains in the side: it is considered very beneficial also for the stings of scorpions and sea-dragons.[76] It is a good plan, too, to rub the body with this juice, mixed with oil, as a preservative against the stings of serpents. A bunch of hyssop is sometimes boiled down with a quarter of a pound of honey, for the cure of cough.

CHAP. 18. (7.)—AFFECTIONS OF THE SIDE, CHEST, AND STOMACH.

For the cure of pains in the side and chest, verbascum[77] is used in water, with rue; powdered betony is also taken in warm water. Juice of scordotis[78] is used as a stomachic,

[70] See B. xxiv. c. 85.

[71] "Aquileges." [72] See B. xxiv. c. 85.

[73] Dried bechion, or coltsfoot, is still smoked by some persons for affections of the chest.

[74] Generally identified with the Phlomos, or Verbascum lychnitis mentioned in B. xxv. c. 74. [75] "Sage." See B. xxv. c. 73.

[76] See B. ix. c. 43, and B. xxxii. c. 53.

[77] See B. xxv. c. 73. [78] See B. xx. c. 27.

centaury also, gentian taken in water, and plantago, either eaten with the food, or mixed with lentils or a pottage of alica.[79] Betony, which is in general prejudicial to the stomach, is remedial for some stomachic affections, taken in drink or chewed, the leaves being used for the purpose. In a similar manner too, aristolochia[80] is taken in drink, or dried agaric is chewed, a draught of undiluted wine being taken every now and then. Nymphæa heraclia[81] is also applied topically in these cases, and juice of peucedanum.[82] For burning pains in the stomach psyllion[83] is applied, or else cotyledon[84] beaten up with polenta, or aizoüm.[85]

### CHAP. 19.—MOLON OR SYRON. AMOMUM.

Molon[86] is a plant with a striated stem, a soft diminutive leaf, and a root four fingers in length, at the extremity of which there is a head like that of garlic; by some persons it is known as "syron." Taken in wine, it is curative of affections of the stomach, and of hardness of breathing. For similar purposes the greater centaury is used, in an electuary; juice also of plantago, or else the plant itself, eaten with the food; pounded betony, in the proportion of one pound to half an ounce of Attic honey, taken daily in warm water; and aristolochia[87] or agaric, taken in doses of three oboli, in warm water or asses' milk.

For hardness of breathing an infusion of cissanthemos[88] is taken in drink, and for the same complaint, as also for asthma, hyssop. For pains in the liver, chest, and side, if unattended with fever, juice of peucedanum is used. For spitting of blood agaric is employed, in doses of one victoriatus,[89] bruised and administered in five cyathi of honied wine: amomum,[90] too, is equally useful for that purpose. For liver diseases in

[79] See B. xviii. c. 29. Fée observes that none of these prescriptions would be countenanced at the present day.

[80] See B. xxv. c. 54.

[81] See B. xxv. c. 37.

[82] See B. xxv. c. 70.

[83] See B. xxv. c. 90.

[84] See B. xxv. c. 101.

[85] See B. xxv. c. 102.

[86] Possibly the same plant as the "Moly" of B. xxv. c. 8. If so, as Fée says, it would appear to belong to the genus Allium, or garlic.

[87] See B. xxv. c. 84.

[88] See B. xxv. c. 68.

[89] See Introduction to Vol. III.

[90] See B. xii. c. 28. Fée says that none of these so-called remedies would now be recognised.

particular, teucria[91] is taken fresh, in doses of four drachmæ to one hemina of oxycrate; or else betony, in the proportion of one drachma to three cyathi of warm water. For diseases of the heart, betony is recommended, in doses of one drachma to two cyathi of cold water. Juice of cinquefoil is remedial for diseases of the liver and lungs, and for spitting of blood as well as all internal affections of the blood. The two varieties of anagallis[92] are wonderfully efficacious for liver complaints. Patients who eat the plant called "capnos"[93] discharge the bile by urine. Acoron[94] is also remedial for diseases of the liver, and daucus[95] is useful for the thorax and the pectoral organs.

### CHAP. 20—THE EPHEDRA OR ANABASIS; THREE REMEDIES.

The ephedra,[96] by some persons called "anabasis," mostly grows in localities exposed to the wind. It climbs the trunks of trees, and hangs down from the branches, is destitute of leaves, but has numerous suckers, jointed like a bulrush; the root is of a pale colour. This plant is given, pounded, in astringent red wine, for cough, asthma, and gripings in the bowels. It is administered also in the form of a pottage, to which some wine should be added. For these complaints, gentian is also used, being steeped in water the day before, and then pounded and given in doses of one denarius, in three cyathi of wine.

### CHAP. 21.—GEUM: THREE REMEDIES.

Geum[97] is a plant with thin, diminutive roots, black, and aromatic.[98] It is curative not only of pains in the chest and sides, but is useful also for dispelling crudities, owing to its agreeable flavour. Vervain, too, is good for all affections of the viscera, and for diseases of the sides, lungs, liver, and

[91] See B. xxv. c. 20.
[92] See B. xxv. c. 92.
[93] See B. xxv. c. 99.
[94] See B. xxv. c. 100.
[95] See B. xxv. c. 64.
[96] Probably the Equisetum silvaticum of Linnæus, our Wild horse-tail. He is in error in saying that it climbs the trunks of trees; a mistake also made by Dioscorides, B. iv. c. 46, who calls it "hippuris." It is said by some to be a strong diuretic. Littré, however, gives as its synonym the Ephedra fragilis of Linnæus.
[97] The Geum urbanum of Linnæus, the Common avens, or herb bennet. It was probably unknown to the Greeks.
[98] Its root has a smell like that of cloves, for which reason it is sometimes known as "Caryophyllata."

thorax. But one invaluable remedy for diseases of the lungs, and for cases of incipient phthisis, is the root of consiligo, a plant only very recently discovered, as already[99] mentioned. It is a most efficient remedy also for pulmonary diseases in swine and cattle, even though only passed through the ear of the animal. When used, it should be taken in water, and kept for a considerable time in the mouth, beneath the tongue. Whether the part of this plant which grows above ground is useful or not for any purpose, is at present unknown. Plantago, eaten with the food, betony taken in drink, and agaric taken in the way prescribed for cough, are useful, all of them, for diseases of the kidneys.

### CHAP. 22.—TRIPOLIUM: THREE REMEDIES.

Tripolium[1] is a plant found growing upon cliffs on the sea-shore against which the waves break, springing up, so to say, neither upon dry land nor in the sea. The leaves are like those of isatis,[2] only thicker; the stem is a palm in height and divided at the extremity, and the root white, thick, and odoriferous, with a warm flavour; it is recommended for diseases of the liver, boiled with spelt. This plant is thought by some to be identical with polium, of which we have already spoken in the appropriate place.[3]

### CHAP. 23.—THE GROMPHÆNA.

Gromphæna[4] is the name of a plant, the stem of which is covered with leaves of a green and rose colour, arranged alternately. The leaves of it are administered in oxycrate, in cases of spitting of blood.

### CHAP. 24.—THE MALUNDRUM: TWO REMEDIES.

For diseases of the liver the malundrum[5] is prescribed, a

[99] In B. xxv. c. 48.

[1] Sprengel identifies it with the Plumbago of B. xxv. c. 22. Fée is not of that opinion, and agrees with Matthioli in considering it to be the Aster tripolium of Linnæus, the Sea starwort. Littré gives the Statice limonium of Linnæus.

[2] See B. xx. c. 25.

[3] In B. xxi. c. 21.

[4] Sprengel and Desfontaines identify it with the Amaranthus tricolor; Fée is strongly of opinion that it has not been correctly identified.

[5] Clusius and Sprengel identify it with the Lychnis silvestris of Linnæus, the Wild lychnis or Viscous catchfly. Fée considers it to be un-

plant which grows in meadows and corn-fields, with a white odoriferous flower. The stem is diminutive, and is beaten up in old wine.

### CHAP. 25.—CHALCETUM; TWO REMEDIES. MOLEMONIUM; ONE REMEDY.

Chalcetum[6] also is the name of a plant, which is pounded with grape husks and applied topically, for the cure of liver complaints. Root of betony acts as a gentle emetic, taken in the same way as hellebore, in doses of four drachmæ in raisin wine or honied wine. Hyssop, too, is beaten up with honey for similar purposes; but it is more efficacious if nasturtium or irio[7] is taken first.

Molemonium[8] is used as an emetic, being taken in doses of one denarius; the same, too, with sillybum.[9] Both of these plants have a milky juice, which thickens like gum, and is taken with honey in the proportions above-mentioned, being particularly good for carrying off bile. On the other hand, vomiting is arrested by the use of wild cummin or powdered betony, taken in water. Crudities and distaste for food are dispelled, and the digestion promoted by employing daucus,[10] powdered betony[11] taken in hydromel, or else plantago boiled like greens. Hiccup is arrested by taking hemionium[12] or aristolochia,[13] and asthma by the use of clymenus.[14] For pleurisy and peripneumony, the greater centaury is used, or else hyssop, taken in drink. Juice of peucedanum[15] is also good for pleurisy.

known, but of the two, would prefer the Lychnis dioica of Linnæus, the White lychnis, or White campion.

[6] C. Bauhin identifies it with the Valeriana locusta of Linnæus, Corn valerian, Corn-salad, or Lamb's lettuce. Fée considers its identity as still unknown.

[7] See B. xviii. c. 10.

[8] Perhaps the same as the Limonium of B. xxv. c. 61.

[9] See B. xxii. c. 42; one of the Sonchi, probably, which contain a milky juice. Littré gives the Sonchus palustris of Linnæus.

[10] See B. xxv. c. 64.

[11] The Betonica officinalis of Linnæus.

[12] Either the Asplenium ceterach of Linnæus, Spleenwort, Ceterach, or Miltwaste, or the A. hemionitis of Linnæus, Mule's fern. See B. xxvii. c. 17.

[13] See B. xxv. c. 54.

[14] See B. xxv. c. 33.

[15] See B. xxv. c. 70.

CHAP. 26.—HALUS OR COTONEA: FIVE REMEDIES.

The plant halus,[16] by the people of Gaul called "sil," and by the Veneti "cotonea," is curative of pains in the side, affections of the kidneys, ruptures, and convulsions. It resembles cunila bubula[17] in appearance, and the tops of it are like those of thyme. It is of a sweet flavour, and allays thirst; the roots of it are sometimes white, sometimes black.

CHAP. 27.—THE CHAMÆROPS: ONE REMEDY. THE STŒCHAS: ONE REMEDY.

The chamærops,[18] also, is similarly efficacious for pains in the side. It is a plant with leaves like those of myrtle, arranged in pairs around the stem, the heads of it resembling those of the Greek rose: it is taken in wine. Agaric, administered in drink, in the same manner[19] as for cough, assuages sciatica and pains in the vertebræ: the same, too, with powdered stœchas[20] or betony, taken in hydromel.

CHAP. 28. (8.)—REMEDIES FOR DISEASES OF THE BELLY.

But it is the belly, for the gratification of which the greater part of mankind exist, that causes the most suffering to man. Thus, for instance, at one time it will not allow the aliments to pass, while at another it is unable to retain them. Sometimes, again, it either cannot receive the food, or, if it can, cannot digest it; indeed, such are the excesses practised at the present day, that it is through his aliment, more than anything else, that man hastens his end. This receptacle,[21] more troublesome to us than any other part of the body, is ever craving, like some importunate creditor, and makes its calls repeatedly in the day. It is for its sake, more particularly, that avarice is so insatiate, for its sake that luxury is so refined,[22] for its sake that men voyage to the shores even of the Phasis, for its sake that the very depths of the ocean are ransacked. And yet, with all this, no one ever gives a thought how abject is the condition of this part of our body, how disgusting the results of its action upon what it has received! No wonder then,

[16] For the identity of this plant, see B. xxvii. c. 24.
[17] See B. xix. c. 50, and B. xx. c. 61.
[18] See B. xxiv. c. 80.
[19] See c. 18 of this Book.
[20] Identified with the Lavendula stœchas of Linnæus, the French lavender.
[21] "Vas."
[22] In search of pheasants. See B. vi. c. 4.

that the belly should have to be indebted to the aid of medicine in the very highest degree!

Scordotis,[23] fresh-gathered and beaten up, in doses of one drachma, with wine, arrests flux of the bowels; an effect equally produced by a decoction of it taken in drink. Polemonia,[24] too, is given in wine for dysentery, or two fingers' length of root of verbascum,[25] in water; seed of nymphæa heraclia,[26] in wine; the upper root of xiphion,[27] in doses of one drachma, in vinegar; seed of plantago, beaten up in wine; plantago itself boiled in vinegar, or else a pottage of alica[28] mixed with the juice of the plant; plantago boiled with lentils; plantago dried and powdered, and sprinkled in drink, with parched poppies pounded; juice of plantago, used as an injection, or taken in drink; or betony taken in wine heated with a red-hot iron. For cœliac affections, betony is taken in astringent wine, or iberis is applied topically, as already[29] stated. For tenesmus, root of nymphæa heraclia is taken in wine, or else psyllion[30] in water, or a decoction of root of acoron.[31] Juice of aizoüm[32] arrests diarrhœa and dysentery, and expels round tape-worm. Root of symphytum,[33] taken in wine, arrests diarrhœa and dysentery, and daucus[34] has a similar effect. Leaves of aizoüm[35] beaten up in wine, and dried alcea[36] powdered and taken in wine, are curative of griping pains in the bowels.

### CHAP. 29.—THE ASTRAGALUS: SIX REMEDIES.

Astragalus[37] is the name of a plant which has long leaves, with numerous incisions, and running aslant near the root. The stems are three or four in number, and covered with leaves: the flower is like that of the hyacinth, and the roots are red, hairy, matted, and remarkably hard. It grows on stony local-

[23] See B. xxv. c. 27.
[24] See B. xxv. c. 28.
[25] See B. xxv. c. 73.
[26] See B. xxv. c. 37.
[27] See B. xxv. c. 89.
[28] See B. xviii. c. 29.
[29] In B. xxv. c. 84.
[30] See B. xxv. c. 90.
[31] See B. xxv. c. 100.
[32] See B. xxv. c. 102.
[33] See B. xxvii. c. 24.
[34] See B. xxv. c. 84.
[35] See Note 32 above.
[36] See B. xxvii. c. 6.
[37] Sprengel identifies it with the Phaca Bætica, Spanish bastard vetch; but the flowers of that plant, as Fée remarks, are yellow. He considers it to be the Lathyrus tuberosus of Linnæus, the Pease earth-nut. Littré gives the Orobus sessilifolius of Sibthorp.

ities, equally exposed to the sun and to falls of snow, those in the vicinity of Pheneus in Arcadia, for instance. Its properties are highly astringent; the root of it, taken in wine, arrests looseness of the bowels, having the additional effect of throwing downward the aqueous humours, and so acting as a diuretic; a property, in fact, which belongs to most substances which act astringently upon the bowels.

Bruised in red[37*] wine, this plant is curative of dysentery; it is only bruised, however, with the greatest difficulty. It is extremely useful, also, as a fomentation for gum-boils. The end of autumn is the time for gathering it, after the leaves are off; it being then left to dry in the shade.

### CHAP. 30.—LADANUM: EIGHTEEN REMEDIES.

Diarrhœa may be also arrested by the use of either kind of ladanum.[38] The kind which is found in corn-fields is pounded for this purpose, and then passed through a sieve, being taken either in hydromel, or in wine of the highest quality. "Ledon" is the name of the plant from which ladanum[39] is obtained in Cyprus, it being found adhering to the beard of the goats there; the most esteemed, however, is that of Arabia.[40] At the present day, it is prepared in Syria and Africa also, being known as "toxicum," from the circumstance that in gathering it, they pass over the plant a bow,[41] with the string stretched, and covered with wool, to which the dewlike flocks of ladanum adhere. We have described it at further length, when treating of the perfumes.[42]

This substance has a very powerful odour, and is hard in the extreme; for, in fact, there is a considerable quantity of earth adhering to it: it is most esteemed when in a pure state, aromatic, soft, green, and resinous. It is of an emollient, desiccative, and ripening nature, and acts as a narcotic: it prevents the hair from falling off, and preserves its dark colour. In combination with hydromel or oil of roses, it is used as an

37* "Rubrum," and not "nigrum," which was also what we call "red" wine.

38 Fée is unable to identify it. The Galeopsis ladanum of Linnæus, the Red dead-nettle, has been suggested, but on insufficient grounds, probably.

39 See B. xii. c. 37.

40 It is still brought from the islands of Greece, but no longer from Arabia.

41 Τοξὸν.

42 In B. xii. c. 37.

injection for the ears; with the addition of salt, it is employed for the cure of furfuraceous eruptions of the skin, and for running ulcers. Taken with storax, it is good for chronic cough; it is also extremely efficacious as a carminative.

CHAP. 31.—CHONDRIS OR PSEUDODICTAMNON: ONE REMEDY. HYPOCISTHIS OR OROBETHRON; TWO VARIETIES: EIGHT REMEDIES.

Chondris, too, or pseudodictamnon,[43] acts astringently on the bowels. Hypocisthis,[44] by some known also as "orobethron," is similar to an unripe pomegranate in appearance; it grows, as already stated,[45] beneath the cisthus, whence its name. Dried in the shade, and taken in astringent, red wine, these plants arrest diarrhœa—for there are two kinds of hypocisthis, it must be remembered, the white and the red. It is the juice of the plant that is used, being of an astringent, desiccative, nature: that of the red kind, however, is the best for fluxes of the stomach. Taken in drink, in doses of three oboli, with amylum,[46] it arrests spitting of blood; and, employed either as a potion or as an injection, it is useful for dysentery. Vervain, too, is good for similar complaints, either taken in water, or, when there are no symptoms of fever, in Aminean[47] wine, the proportion being five spoonfuls to three cyathi of wine.

CHAP. 32.—LAVER OR SION: TWO REMEDIES.

Laver,[48] too, a plant which grows in streams, preserved and boiled, is curative of griping pains in the bowels.

CHAP. 33.—POTAMOGITON: EIGHT REMEDIES. THE STATICE: THREE REMEDIES.

Potamogiton,[49] too, taken in wine, is useful for dysentery and cœliac affections: it is a plant similar to beet in the leaves, but smaller and more hairy, and rising but little above the surface of the water. It is the leaves that are used, being of a refreshing, astringent nature, and particularly good for diseases of the legs, and, with honey or vinegar, for corrosive ulcers.

[43] "False-dittany," or "bastard dittany." See B. xxv. c. 53.
[44] The Cytinus hypocisthis of Linnæus.
[45] In B. xxiv. c. 28.
[46] See B. xviii. c. 17, and B. xxii. c. 67.
[47] See B. xiv. c. 5.
[48] The Sium of B. xxii. c. 41.
[49] Probably the Potamogeton natans of Linnæus, Broad-leaved pondweed, or some kindred plant. Its name signifies "the neighbour of rivers."

Castor has given a different description of this plant. According to him, it has a smaller leaf,[50] like horse-hair,[51] with a long, smooth, stem, and grows in watery localities. With the root of it he used to treat scrofulous sores and indurations. Potamogiton neutralizes the effects of the bite of the crocodile; hence it is that those who go in pursuit of that animal, are in the habit of carrying it about them.

Achillea[52] also arrests looseness of the bowels; an effect equally produced by the statice,[53] a plant with seven heads, like those of the rose, upon as many stems.

CHAP. 34.—THE CERATIA: TWO REMEDIES. LEONTOPODION, LEUCEORON, DORIPETRON, OR THORYBETHRON. LAGOPUS: THREE REMEDIES.

The ceratia[54] is a plant with a single[55] leaf, and a large knotted root: taken with the food, it is curative of cœliac affections and dysentery.

Leontopodion,[56] a plant known also as "leuceoron," "doripetron," or "thorybethron," has a root which acts astringently upon the bowels and carries off bile, being taken in doses of two denarii in hydromel. It grows in champaign localities with a poor soil: the seed, taken in drink, produces night-mare,[57] it is said, in the sleep.

Lagopus[58] arrests diarrhœa, taken in wine, or, if there are symptoms of fever, in water. This plant is attached to the groin, for tumours in that part of the body: it grows in cornfields. Many persons recommend, in preference to anything else,

[50] C. Bauhin and Sprengel identify the plant here described with the Potamogeton pusillum of Linnæus; but Fée considers it extremely doubtful.

[51] A species of Equisetum would seem to be meant; indeed, Littré gives the Equisetum telmateia.

[52] See B. xxv. c. 19.

[53] Fée thinks that this may possibly be the Statice Armeria of Linnæus, Sea thrift, or Sea gilly-flower.

[54] Considered by Sprengel to be the Cyclaminos chamæcissos of B. xxv. c. 69, which he identifies with the Convallaria bifolia of Linnæus, the Little lily of the valley, or May lily. Fabius Columna and Brotero consider it to be the Dentaria trifolia, Three-leaved toothwort.

[55] This is incorrect, if it is the Lily of the valley.

[56] "Lion's paw," "white plant," or "rock-spear." Probably the Leontice leontopetalum of Linnæus, Lion's paw, or Lion's leaf. See B. xxvii. c. 72.

[57] "Lymphatica somnia."

[58] "Hare's foot." Possibly the Trifolium arvense of Linnæus, Hare's foot trefoil.

for desperate cases of dysentery, a decoction of roots of cinquefoil in milk, or else aristolochia,[59] in the proportion of one victoriatus[60] to three cyathi of wine. In the case of the preparations above-mentioned, which are recommended to be taken warm, it will be the best plan to heat them with a red-hot iron.

On the other hand, again, the juice of the smaller centaury acts as a purgative upon the bowels, and carries off bile, taken, in doses of one drachma, in one hemina of water with a little salt and vinegar. The greater centaury is curative of griping pains in the bowels. Betony, also, has a laxative effect, taken in the proportion of four drachmæ to nine cyathi of hydromel: the same, too, with euphorbia[61] or agaric, taken, in doses of two drachmæ, with a little salt, in water, or else in three oboli of honied wine. Cyclaminos,[62] also, is a purgative, either taken in water or used as a suppository; the same, too, with chamæcissos,[63] employed as a suppository. A handful of hyssop, boiled down to one third with salt, or beaten up with oxymel and salt, and applied to the abdomen, promotes pituitous evacuations, and expels intestinal worms. Root also of peucedanum[64] carries off pituitous humours and bile.

CHAP. 35.—EPITHYMON OR HIPPOPHEOS: EIGHT REMEDIES.

The two kinds of anagallis, taken in hydromel, are purgative; the same, too, with epithymon,[65] which is the blossom of a sort[66] of thyme similar to savory; the only difference being that the flower of this plant is nearer grass green, while that of the other thyme is white. Some persons call it "hippopheos."[67] This plant is by no means wholesome to the stomach, as it is apt to cause vomiting, but at the same time it disperses

[59] See B. xxv. c. 54.

[60] See Introduction to Vol. III. Fée remarks that none of the assertions in the present Chapter are confirmed by modern experience.

[61] See B. xxv. c. 38.

[62] See B. xxv. c. 67.

[63] See B. xxiv. cc. 49, 84, and B. xxv. c. 69.

[64] See B. xxv. c. 70.

[65] Identical with the Orobanche of B. xviii. c. 44, the Cuscuta Europæa of Linnæus. Dodder, Hell-weed, or Devil's guts; or else the Cuscuta minor, or epithymum of Linnæus. See also B. xxii. cc. 78, 80.

[66] He is in error here.

[67] Hardouin suggests "hypopheos," as "springing up under the Pheos" or Stœbe, mentioned in B. xxii. c. 13.

flatulency and gripings of the bowels. It is taken also, in the form of an electuary, for affections of the chest, with honey, or in some cases, with iris.[68] Taken in doses of from four to six drachmæ, with honey and a little salt and vinegar, it relaxes the bowels.

Some persons, again, give a different description of epithymon: according to them, it is a plant without[69] a root, diminutive, and bearing a flower resembling a small hood, and of a red colour. They tell us, too, that it is dried in the shade and taken in water, in doses of half an acetabulum; and that it has a slightly laxative effect upon the bowels, and carries off the pituitous humours and bile. Nymphæa[70] is taken for similar purposes, in astringent wine.

### CHAP. 36.—PYCNOCOMON; FOUR REMEDIES.

Pycnocomon,[71] too, is a purgative. It is a plant with leaves like those of rocket, only thicker and more acrid; the root is round, of a yellow colour, and with an earthy smell. The stem is quadrangular, of a moderate length, thin, and surmounted with a flower like that of ocimum.[72] It is found growing in rough stony soils. The root, taken in doses of two denarii in hydromel, acts as a purgative upon the bowels, and effectually carries off bile and pituitous humours. The seed, taken in doses of one drachma in wine, is productive of dreams and restlessness. Capnos,[73] too, carries off bile by the urine.

### CHAP. 37.—POLYPODION: THREE REMEDIES.

Polypodion,[74] known to us by the name of "filicula," bears some resemblance to fern. The root of it is used medicinally;

[68] See B. xxi. c. 19.

[69] It has a root originally, but the root withers as soon as it has attached itself to the stem of the plant to which it clings.

[70] See B. xxv. c. 37. Holland says, on the contrary, that it is a binding plant.

[71] "Thick hair." It is generally identified with the Leonurus marrubiastrum of Linnæus. Columna makes it to be the Scabiosa succisa of Linnæus, the Devil's bit scabious, and Brunsfeld the Angelica silvestris of Linnæus, Wild angelica.

[72] See B. xxi. c. 60.

[73] See B. xxv. c. 98.

[74] "Many-footed." The Polypodium vulgare of Linnæus, the Common polypody.

being fibrous, and of a grass green colour within, about the thickness of the little finger, and covered with cavernous suckers like those on the arms of the polypus. This plant is of a sweetish[75] taste, and is found growing among rocks and under trees. The root is steeped in water, and the juice extracted; sometimes, too, it is cut in small pieces and sprinkled upon cabbage, beet, mallows, or salt meat; or else it is boiled with pap,[76] as a gentle aperient for the bowels, in cases of fever even. It carries off bile also and the pituitous humours, but acts injuriously upon the stomach. Dried and powdered and applied to the nostrils, it cauterizes polypus[77] of the nose. It has neither seed[78] nor flower.

CHAP. 38.—SCAMMONY; EIGHT REMEDIES.

Scammony,[79] also, is productive of derangement of the stomach. It carries off bile, and acts strongly as a purgative upon the bowels; unless, indeed, aloes are added, in the proportion of two drachmæ of aloes to two oboli of scammony. The drug thus called is the juice of a plant that is branchy from the root, and has unctuous, white, triangular, leaves, with a solid, moist root, of a nauseous flavour: it grows in rich white soils. About the period of the rising of the Dog-star, an excavation is made about the root, to let the juice collect: which done, it is dried in the sun and divided into tablets. The root itself, too, or the outer coat of it, is sometimes dried. The scammony most esteemed is that of Colophon, Mysia, and Priene. In appearance it ought to be smooth and shiny, and as much like bull glue as possible: it should present a fungous surface also, covered with minute holes; should melt with the greatest rapidity, have a powerful smell, and be sticky like gum. When touched with the tongue, it should give out a white milky liquid; it ought also to be extremely light, and to turn white when melted.

[75] It is for this reason that it is called "reglisse," or "liquorice," in some parts of France. It contains a proportion of saccharine matter, which acts as a purgative.

[76] "Pulticula."

[77] This fancy is solely based on the accidental resemblance of the name.

[78] He very incorrectly says this of all the ferns. See B. xxvii. cc. 17, 48, and 55.

[79] The produce of the Convolvulus scammonia of Linnæus, the Scammony bind-weed. The scammony of Aleppo is held in the highest esteem, and is very valuable. That of Smyrna also is largely imported.

This last feature is recognized in the spurious scammony also, a compound of meal of fitches and juice of marine tithymalos,[80] which is mostly imported from Judea, and is very apt to choke those who use it. The difference may be easily detected, however, by the taste, as tithymalos imparts a burning sensation to the tongue. To be fully efficacious, scammony should be two[81] years old; before or after that age it is useless. It has been prescribed to be taken by itself also, in doses of four oboli, with hydromel and salt: but the most advantageous mode of using it is in combination with aloes, care being taken to drink honied wine the moment it begins to operate. The root, too, is boiled down in vinegar to the consistency of honey, and the decoction used as a liniment for leprosy. The head is also rubbed with this decoction, mixed with oil, for head-ache.

### CHAP. 39.—THE TITHYMALOS CHARACIAS.

The tithymalos is called by our people the "milk plant,"[82] and by some persons the "goat lettuce."[83] They say, that if characters are traced upon the body with the milky juice of this plant, and powdered with ashes, when dry, the letters will be perfectly visible; an expedient which has been adopted before now by intriguers, for the purpose of communicating with their mistresses, in preference to a correspondence by letter. There are numerous varieties of this plant.[84] The first kind has the additional name of "characias,"[85] and is generally looked upon as the male plant. Its branches are about a finger in thickness, red and full of juice, five or six in number, and a cubit in length. The leaves near the root are almost exactly those of the olive, and the extremity of the stem is surmounted with a tuft like that of the bulrush: it is found growing in rugged localities near the sea-shore. The seed is gathered in autumn, together with the tufts, and after being dried in the sun, is beaten out and put by for keeping.

[80] See the following Chapters.

[81] This assertion is erroneous; it has all its properties in full vigour immediately after extraction, and retains them for an indefinite period.

[82] "Herba lactaria."

[83] Because goats are fond of it. See B. xx. c. 24.

[84] Known to us by the general name of Euphorbia of Spurge.

[85] The Euphorbia characias of Linnæus, Red spurge. An oil is still extracted from the seed of several species of Euphorbia, as a purgative; but they are in general highly dangerous. taken internally

As to the juice, the moment the down begins to appear upon the fruit, the branches are broken off and the juice of them is received upon either meal of fitches or else figs, and left to dry therewith. Five drops are as much as each fig ought to receive; and the story is, that if a dropsical patient eats one of these figs he will have as many motions as the fig has received drops. While the juice is being collected, due care must be taken not to let it touch the eyes. From the leaves, pounded, a juice is also extracted, but not of so useful a nature as the other kind: a decoction, too, is made from the branches.

The seed also is used, being boiled with honey and made up into purgative[86] pills. These seeds are sometimes inserted in hollow teeth with wax: the teeth are rinsed too, with a decoction of the root in wine or oil. The juice is used externally for lichens, and is taken internally both as an emetic and to promote alvine evacuation: in other respects, it is prejudicial to the stomach. Taken in drink, with the addition of salt, it carries off pituitous humours; and in combination with saltpetre,[86*] removes bile. In cases where it is desirable that it should purge by stool, it is taken with oxycrate, but where it is wanted to act as an emetic, with raisin wine or hydromel; three oboli being a middling dose.* The best method, however, of using it, is to eat the prepared figs above-mentioned, just after taking food. In taste, it is slightly burning to the throat; indeed it is of so heating a nature, that, applied externally by itself, it raises blisters on the flesh, like those caused by the action of fire. Hence it is that it is sometimes employed as a cautery.

### CHAP. 40.—THE TITHYMALOS MYRTITES, OR CARYITES; TWENTY-ONE REMEDIES.

A second kind of tithymalos is called "myrtites"[87] by some persons, and "caryites" by others. It has leaves like those of myrtle, pointed and prickly, but with a softer surface, and grows, like the one already mentioned, in rugged soils. The tufted heads of it are gathered just as barley is beginning to swell in the ear, and, after being left for nine days in the shade, are thoroughly dried in the sun. The fruit does not ripen all at

[86] "Catapotia." [86*] "Aphronitrum." See B. xxx. c. 46.
[87] The Euphorbia myrsinites of Linnæus.

once, some, indeed, not till the ensuing year. The name given to this fruit is the "nut," whence the Greek appellation "caryites."[88] It is gathered at harvest, and is washed and dried, being given with twice the quantity of black poppy, in doses of one acetabulum in all.

As an emetic, this kind is not so efficacious as the preceding one, and, indeed, the same may be said of all the others. Some physicians recommend the leaf to be taken in the manner already mentioned, but say that the nut should either be taken in honied wine or raisin wine, or else with sesame. It carries off pituitous humours and bile by stool, and is curative of ulcerations of the mouth. For corrosive sores of the mouth, the leaf is eaten with honey.

### CHAP. 41.—THE TITHYMALOS PARALIOS, OR TITHYMALIS: FOUR REMEDIES.

A third kind of tithymalos is known by the additional name of "paralios,"[89] or else as "tithymalis."[90] The leaf is round, the stem a palm in height, the branches red, and the seed white. This seed is gathered just as the grape is beginning to form, and is dried and pounded; being taken as a purgative, in doses of one acetabulum.

### CHAP. 42.—THE TITHYMALOS HELIOSCOPIOS: EIGHTEEN REMEDIES.

A fourth kind of tithymalos[91] is known by the additional name of "helioscopios."[92] It has leaves like those of purslain,[93] and some four or five small branches standing out from the root, of a red colour, half a foot in height, and full of juice. This plant grows in the vicinity of towns: the seed is white, and pigeons[94] are remarkably fond of it. It receives its additional name of "helioscopios" from the fact that the heads of it turn[95] with the sun. Taken in doses of half an acetabulum, in oxymel, it carries off bile by stool: in other respects it has the same properties as the characias, above-mentioned.

[88] From the Greek *κάρυον*, a "nut."
[89] "Sea-shore" tithymalus. See B. xx. c. 80.
[90] The Euphorbia paralias of Linnæus, Sea spurge.
[91] The Euphorbia helioscopia of Linnæus, Sun spurge or Wart-wort.
[92] "Sun-watching." [93] See B. xx. c. 81.
[94] Fée says that this is more than doubtful.
[95] An assertion, Fée says, not confirmed by modern observation.

CHAP. 43.—THE TITHYMALOS CYPARISSIAS: EIGHTEEN REMEDIES.

In the fifth place we have the tithymalos known as "cyparissias,"[96] from the resemblance of its leaves to those of the cypress. It has a double or triple stem, and grows in champaign localities. Its properties are exactly similar to those of the helioscopios and characias.

CHAP. 44.—THE TITHYMALOS PLATYPHYLLOS, CORYMBITES, OR AMYGDALITES: THREE REMEDIES.

The sixth kind is called "platyphyllos"[97] by some, and "corymbites" or "amygdalites" by others, from its resemblance to the almond-tree. The leaves of this kind are the largest of all: it has a fatal effect upon fish. An infusion of the root or leaves, or the juice, taken in doses of four drachmæ, in honied wine, or hydromel, acts as a purgative. It is particularly useful also for carrying off the aqueous humours.

CHAP. 45.—THE TITHYMALOS DENDROÏDES, COBIOS, OR LEPTOPHYLLOS: EIGHTEEN REMEDIES.

The seventh kind has the additional name of "dendroïdes,"[98] and is known by some persons as "cobios," and by others as "leptophyllos."[99] It grows among rocks, and is by far the most shrubby of all the varieties of the tithymalos. The stems of it are small and red, and the seed is remarkably abundant. Its properties are the same as those of the characias.[1]

CHAP. 46.—THE APIOS ISCHAS, OR RAPHANOS AGRIA: TWO REMEDIES.

The apios ischas or raphanos agria,[2] throws out two or three rush-like branches of a red colour, creeping upon the ground, and bearing leaves like those of rue. The root resembles that of an onion, only that it is larger, for which

[96] The Euphorbia cyparissias of Linnæus, the Cypress spurge, or else the Euphorbia Aleppica of Linnæus.

[97] "Broad-leaved," "clustered," and "almond-like." It is the Euphorbia platyphyllos of Linnæus, the Broad-leaved spurge.

[98] "Tree-like"

[99] "Small-leaved." The Euphorbia dendroides of Linnæus, the Shrubby spurge.

[1] See c. 39 above.

[2] "Wild radish." Identified with the Euphorbia apios of Linnæus, a plant with dangerous properties.

reason some have called it the "wild radish." The interior of this root is composed of a mammose substance, containing a white juice: the outer coat is black. It grows in rugged, mountainous spots, and sometimes in pasture lands. It is taken up in spring, and pounded and put into an earthen vessel, that portion of it being removed which floats upon the surface. The part which remains acts purgatively, taken in doses of an obolus and a half in hydromel, both as an emetic and by stool. This juice is administered also, in doses of one acetabulum, for dropsy.

The root of this plant is dried and powdered, and taken in drink: the upper part of it, they say, carries off bile by acting as an emetic, the lower part, by promoting alvine evacuation.

### CHAP. 47.—REMEDIES FOR GRIPING PAINS IN THE BOWELS.

Every kind of panaces[3] is curative of gripings in the bowels; as also betony, except in those cases where they arise from indigestion. Juice of peucedanum[4] is good for flatulency, acting powerfully as a carminative: the same is the case, also, with root of acoron[5] and with daucus,[6] eaten like lettuce as a salad. Ladanum[7] of Cyprus, taken in drink, is curative of intestinal affections; and a similar effect is produced by powdered gentian, taken in warm water, in quantities about as large as a bean. For the same purpose, plantago[8] is taken in the morning, in doses of two spoonfuls, with one spoonful of poppy in four cyathi of wine, due care being taken that it is not old wine. It is given, too, at the last moment before going to sleep, and with the addition of nitre or polenta,[9] if a considerable time has elapsed since the last meal. For colic, an injection of the juice is used, one hemina at a time, even in cases where fever has supervened.

### CHAP. 48.—REMEDIES FOR DISEASES OF THE SPLEEN.

Agaric, taken in doses of three oboli in one cyathus of old wine, is curative of diseases of the spleen. The same, too, with the root of every kind of panaces,[10] taken in honied wine: teucria,[11] also, is particularly useful for the same purpose,

[3] See B. xxv. c. 11, *et seq.*
[4] See B. xxv. c. 70.
[5] See B. xxv. c. 100.
[6] See B. xxv. c. 64.
[7] See B. xii. c. 37, and c. 30 of this Book.
[8] See B. xxv. c. 39.
[9] See B. xviii. c. 14.
[10] See B. xxv. c. 11, *et seq.*
[11] See B. xxiv. c. 80.

taken in a dry state, or boiled down in the proportion of one handful to three heminæ of vinegar. Teucria, too, is applied with vinegar to wounds of the spleen, or, if the patient cannot bear the application of vinegar, with figs or water. Polemonia[12] is taken in wine, and betony, in doses of one drachma, in three cyathi of oxymel: aristolochia, too, is used in the same manner as for injuries inflicted by serpents.[13] Argemonia,[14] it is said, taken with the food for seven consecutive days, diminishes the volume of the spleen; and a similar effect is attributed to agaric, taken in doses of two oboli, in oxymel. Root, too, of nymphæa heraclia,[15] taken in wine, or by itself, diminishes the spleen.

Cissanthemos,[16] taken twice a day, in doses of one drachma in two cyathi of white wine, for forty consecutive days, gradually carries off the spleen, it is said, by urine. Hyssop, boiled with figs, is very useful for the same purpose: root of lonchitis,[17] also, boiled before it has shed its seed. A decoction of root of peucedanum[18] is good for the spleen and kidneys. Acoron,[19] taken in drink, diminishes the spleen; and the roots of it are very beneficial for the viscera and iliac regions. For similar purposes, seed of clymenus[20] is taken, for thirty consecutive days, in doses of one denarius, in white wine. Powdered betony is also used, taken in a potion with honey and squill vinegar; root too of lonchitis is taken in water. Teucrium[21] is used externally for diseases of the spleen; scordium,[22] also, in combination with wax; and agaric, mixed with powdered fenugreek.

### CHAP. 49.—REMEDIES FOR CALCULI AND DISEASES OF THE BLADDER.

For diseases of the bladder and calculi (affections which, as already observed,[23] produce the most excruciating torments), polemonia[24] is highly efficacious, taken in wine; agaric also, and leaves or root of plantago, taken in raisin wine. Betony,

[12] See B. xxv. c. 28.
[13] See B. xxv. c. 55.
[14] See B. xxv. c. 56.
[15] See B. xxv. c. 37.
[16] See B. xxv. c. 68.
[17] See B. xxv. c. 88. Fée says that it is the Aspidium lonchitis of Linnæus, that is meant.
[18] See B. xxv. c. 70.
[19] See B. xxv. c. 100.
[20] See B. xxv. c. 33.
[21] See B. xxv. c. 20.
[22] Or Scordotis. See B. xxv. c. 27.
[23] In B. xxv. c. 7.
[24] See B. xxv. c. 28.

too, is very good, as already observed, when speaking[25] of diseases of the liver. This last plant is used also for hernia, applied topically or taken in drink: it is remarkably efficacious too for strangury. For calculi some persons recommend betony, vervain, and milfoil, in equal proportions in water, as a sovereign remedy. It is universally agreed that dittany is curative of strangury, and that the same is the case with cinquefoil, boiled down to one third in wine: this last plant is very useful, too, taken internally and applied topically, for rupture of the groin.

The upper part of the root of xiphion[26] has a diuretic effect upon infants; it is administered also in water for rupture of the groin, and is applied topically for diseases of the bladder. Juice of peucedanum[27] is employed for hernia in infants, and psyllion[28] is used as an application in cases of umbilical hernia. The two kinds of anagallis[29] are diuretic, and a similar effect is produced by a decoction of root of acoron,[30] or the plant itself bruised and taken in drink; this last is good too for all affections of the bladder. Both the stem and root of cotyledon[31] are used for the cure of calculi; and for all inflammations of the genitals, myrrh is mixed in equal proportions with the stem and seed. The more tender leaves of ebulum,[32] beaten up and taken with wine, expel calculi of the bladder, and an application of them is curative of diseases of the testes. Erigeron,[33] with powdered frankincense and sweet wine, is curative of inflammation of the testes; and root of symphytum,[34] applied topically, reduces rupture of the groin. The white hypocisthis[35] is curative of corroding ulcers of the genitals. Artemisia[36] is prescribed also in sweet wine for the cure of calculi and of strangury; and root of nymphæa heraclia,[37] taken in wine, allays pains in the bladder.

### CHAP. 50.—CRETHMOS: ELEVEN REMEDIES. CACHRY.

A similar property belongs also to crethmos,[38] a plant highly

[25] See c. 19 of this Book.
[26] See B. xxv. cc. 88, 89.
[27] See B. xxv. c. 70.
[28] See B. xxv. c. 90.
[29] See B. xxv. c. 92.
[30] See B. xxv. c. 100.
[31] It is quite useless for such a purpose; and the same is the case, Fée says, with all the asserted remedies mentioned in this Chapter. See B. xxv. c. 101.
[32] See B. xxv. c. 71.
[33] See B. xxv. c. 106.
[34] See B. xxvii. c. 24.
[35] See c. 31 of this Book.
[36] See B. xxv. c. 36.
[37] See B. xxv. c. 37.
[38] See B. xxv. c. 96.

praised by Hippocrates.[39] This is one of the wild plants that are commonly eaten—at all events, we find Callimachus mentioning it as one of the viands set on table by the peasant Hecale.[40] It is a species of garden batis,[41] with a stem a palm in height, and a hot seed, odoriferous like that of libanotis,[42] and round. When dried, the seed bursts asunder, and discloses in the interior a white kernel, known as "cachry" to some. The leaf is unctuous and of a whitish colour, like that of the olive, only thicker and of a saltish taste. The roots are three or four in number, and about a finger in thickness: the plant grows in rocky localities, upon the sea-shore. It is eaten raw or else boiled with cabbage, and has a pleasant, aromatic flavour; it is preserved also in brine.

This plant is particularly useful for strangury, the leaves, stem, or root being taken in wine. It improves the complexion of the skin also, but if taken in excess is very apt to produce flatulency. Used in the form of a decoction it relaxes the bowels, has a diuretic effect, and carries off the humours from the kidneys. The same is the case also with alcea:[43] dried and powdered and taken in wine, it removes strangury, and, with the addition of daucus,[44] is still more efficacious: it is good too for the spleen, and is taken in drink as an antidote to the venom of serpents. Mixed with their barley it is remarkably beneficial for beasts of burden, when suffering from pituitous defluxions or strangury.

### CHAP. 51.—THE ANTHYLLION; TWO REMEDIES. THE ANTHYLLIS: TWO REMEDIES.

The anthyllion[45] is a plant very like the lentil. Taken in wine, it is remedial for diseases of the bladder, and arrests hæmorrhage. Another variety of it is the anthyllis, a plant resembling the chamæpitys,[46] with a purple flower, a powerful smell, and a root like that of endive.

### CHAP. 52.—CEPÆA: ONE REMEDY.

The plant known as "cepæa"[47] is even more efficacious. It

[39] De Nat. Mul. c. 20, and De Morb. Mul. I. 10.
[40] See B. xxii. c. 44.
[41] See B. xxi. c. 50.
[42] See B. xxv. c. 18.
[43] See B. xxvii. c. 6.
[44] See B. xxv. c. 64.
[45] See B. xxi. c. 103.
[46] See B. xxi. c. 103.
[47] The Sedum cepæa of Linnæus, the Sea purslain. Holland calls it "Beccabunga," or "Brooklime."

resembles purslain in appearance, but has a darker root, that is never used: it grows upon the sands of the sea-shore, and has a bitter taste. Taken in wine with root of asparagus, it is remarkably useful for diseases of the bladder.

### CHAP. 53.—HYPERICON, CHAMÆPITYS, OR CORISON: NINE REMEDIES.

Hypericon,[48] otherwise known as the "chamæpitys"[49] or "corison,"[50] is possessed of similar properties. It is a plant[51] with a stem like that[52] of a garden vegetable, thin, red, and a cubit in length. The leaf is similar to that of rue, and has an acrid smell: the seed is enclosed in a swarthy pod, and ripens at the same time as barley. This seed is of an astringent nature, arrests diarrhœa, and acts as a diuretic: it is taken also for diseases of the bladder, in wine.

### CHAP. 54.—CAROS OR HYPERICON: TEN REMEDIES.

There is another hypericon also, known as "caros"[53] by some. The leaves of it resemble those of the tamarix,[54] beneath[55] which it grows, but are more unctuous[56] and not so red. It is an odoriferous plant, somewhat more than a palm[57] in height, of a sweet flavour, and slightly pungent. The seed is of a warming nature, and is consequently productive of eructations; it is not, however, injurious to the stomach. This plant is particularly useful for strangury, provided the bladder

[48] Perhaps so called from the impressions on the leaves, ὑπὲρ and ἐικων, or else from its resemblance to heath, ὑπὲρ and ἐρέικη. See, however Note 55 below.

[49] "Ground pine."

[50] Sillig reads this "corissum." Former editions have "corion."

[51] Identified by Fée with the Hypericum perforatum of Linnæus, the Perforated St. John's wort. Littré gives the Hypericum crispum of Linnæus.

[52] "Oleraceo." Another reading is "surculaceo," "tough and ligneous;" and is, perhaps, preferable.

[53] "Coris" is the old and more common reading. Fée identifies it with the Hypericum coris of Linnæus, and Brotero with the H. saxatile of Tournefort. Desfontaines gives as its synonym the Coris Monspelliensis.

[54] See B. xxiv. c. 41.

[55] It is not improbable, supposing the "tamarix" to be one of the Ericæ, that to this circumstance it may owe its name. Indeed Dioscorides has ἐρέικη, in the corresponding passage.

[56] "Pinguioribus."

[57] Dioscorides gives the stem larger dimensions.

be not ulcerated; taken in wine, it is curative of pleurisy also.

CHAP. 55.—THE CALLITHRIX: ONE REMEDY. THE PERPRESSA: ONE REMEDY. THE CHRYSANTHEMUM: ONE REMEDY. THE ANTHEMIS: ONE REMEDY.

Callithrix,[58] beaten up with cummin seed, and administered in white wine, is useful also for diseases of the bladder. Leaves of vervain, boiled down to one third, or root of vervain, in warm honied wine, expel calculi of the bladder.

Perpressa,[59] a plant which grows in the vicinity of Arretium and in Illyricum, is boiled down to one third in three heminæ of water, and the decoction taken in drink: the same too with trefoil,[60] which is administered in wine; and the same with the chrysanthemum.[61] The anthemis[62] also is an expellent of calculi. It is a plant with five small leaves running from the root, two long stems, and a flower like a rose. The roots of it are pounded and administered alone, in the same way as raw laver.[63]

CHAP. 56.—SILAUS: ONE REMEDY.

Silaus[64] is a plant which grows in running streams with a gravelly bed. It bears some resemblance to parsley, and is a cubit in height. It is cooked in the same manner as the acid vegetables,[65] and is of great utility for affections of the bladder. In cases where that organ is affected with eruptions,[66] it is used in combination with root of panaces,[67] a plant which is otherwise bad for the bladder.

[58] See B. xxii. c. 30, and B. xxv. c. 86.

[59] This plant has not been identified. Anguillara says that it is the same as the "repressa," a plant given to horses by the people at Rome, when suffering from dysuria. What this plant is, no one seems to know.

[60] See B. xxi. c. 30.

[61] The same as the Helichrysos of B. xx. cc. 38 and 96. It is identified with the Chrysanthemum segetum of Linnæus, the Corn marygold.

[62] Fée identifies it with the Eranthemis of B. xxii. c. 26, which he considers to be the Anthemis rosea of Linnæus, the Rose camomile.

[63] See c. 32 of this Book.

[64] Hardouin thinks that it is the Apium graveolens of Linnæus, Smallage; but at the present day it is generally identified with the Peucedanum silaus of Linnæus, the Meadow sulphur-wort, or saxifrage.

[65] Sorrel, for instance.

[66] "Scabiem."

[67] See B. xxv. c. 11.

The erratic apple,[68] too, is an expellent of calculi. For this purpose, a pound of the root is boiled down to one half in a congius of wine, and one hemina of the decoction is taken for three consecutive days, the remainder being taken in wine with sium.[69] Sea-nettle[70] is employed too for the same purpose, daucus,[71] and seed of plantago in wine.

### CHAP. 57.—THE PLANT OF FULVIUS.

The plant of Fulvius[72] too—so called from the first discoverer of it, and well known [73] to herbalists—bruised in wine, acts as a diuretic.

### CHAP. 58.—REMEDIES FOR DISEASES OF THE TESTES AND OF THE FUNDAMENT.

Scordion[74] reduces swellings of the testes. Henbane is curative of diseases of the generative organs. Strangury is cured by juice of peucedanum,[75] taken with honey; as also by the seed of that plant. Agaric is also used for the same purpose, taken in doses of three oboli in one cyathus of old wine; root of trefoil, in doses of two drachmæ in wine; and root or seed of daucus,[76] in doses of one drachma. For the cure of sciatica, the seed and leaves of erythrodanum[77] are used, pounded; panaces,[78] taken in drink; polemonia,[79] employed as a friction; and leaves of aristolochia,[80] in the form of a decoction. Agaric, taken in doses of three oboli in one cyathus of old wine, is curative of affections of the tendon known as "platys"[81] and of pains in the shoulders. Cinquefoil is either taken in drink or applied topically for the cure of sciatica; a decoction of scammony is used also, with barley meal; and the seed of either kind of hypericon[82] is taken in wine.

[68] Generally supposed to be the same as the "Apple of the earth," mentioned in B. xxv. c. 54.

[69] See B. xx. c. 41.

[70] It is doubtful whether he means an animal or plant; most probably the latter, but if so, it is quite unknown.

[71] See B. xxv. c. 64.

[72] "Herba Fulviana."

[73] A plant now unknown.

[74] See B. xxv. c. 27. In reality it is of an irritating nature.

[75] See B. xxv. c. 70.

[76] See B. xxv. c. 64.

[77] Or madder; see B. xix. c. 17. The seed and leaves are no longer employed in medicine; the root has been employed in modern times, Fée says, but with no success.

[78] See B. xxv. c. 11, *et seq.*

[79] See B. xxv. c. 28.

[80] See B. xxv. c. 54.

[81] Or "broad" tendon. The Tendon Achillis.

[82] See cc. 53 and 54 of this Book.

For diseases of the fundament and for excoriations plantago is remarkably efficacious; for condylomata, cinquefoil; and for procidence of the rectum, root of cyclaminos,[83] applied in vinegar. The blue anagallis[84] reduces procidence of the rectum, while, on the contrary, that with a red flower has a tendency to bear it down. Cotyledon[85] is a marvellous cure for condylomatous affections and piles; and root of acoron,[86] boiled in wine and beaten up, is a good application for swelling of the testes. According to what Cato[87] says, those who carry about them Pontic[88] wormwood, will never experience chafing between the thighs.

(9.) Some persons add pennyroyal to the number of these plants: gathered fasting, they say, and attached to the hinder part of the body, it will be an effectual preservative against all pains in the groin, and will allay them in cases where they already exist.

### CHAP. 59.—INGUINALIS OR ARGEMO.

Inguinalis[89] again, or, as some persons call it, "argemo," a plant commonly found growing in bushes and thickets, needs only to be held in the hand to be productive of beneficial effects upon the groin.

### CHAP. 60.—REMEDIES FOR INFLAMED TUMOURS. CHRYSIPPIOS: ONE REMEDY.

Panaces,[90] applied with honey, heals inflammatory tumours; an effect which is equally produced by plantago applied with salt, cinquefoil, root of persolata[91] used in the same way as for scrofula; damasonium[92] also, and verbascum[93] pounded with the root, and then sprinkled with wine, and wrapped in a leaf warmed upon ashes, and applied hot. Persons of experience in these matters have asserted that it is of primary importance that the application should be made by a maiden, as also that she must be naked at the time, and fasting. The patient must

[83] See B. xxv. c. 67.
[84] See B. xxv. c. 92.
[85] See B. xxv. c. 101.
[86] See B. xxv. c. 100.
[87] De Re Rust. c. 159. He says that it must be carried under the ring.
[88] See B. xxvii. c. 28.
[89] The "Groin plant." Probably the same as the Bubonion of B. xxvii. c. 19.
[90] See B. xxv. c. 11, *et seq.*
[91] See c. 12 of this Book.
[92] See B. xxv. c. 77.
[93] See B. xxv. c. 73.

be fasting too, and the damsel must say, touching him with the back of her hand,[94] "Apollo forbids that a disease shall increase which a naked virgin restrains." So saying, she must withdraw her hand, and repeat to the above effect three times, both of them spitting upon the ground each time.

Root, too, of mandragora[95] is used for this purpose, with water; a decoction of root of scammony with honey; sideritis[96] beaten up with stale grease; horehound with stale axle-grease; or chrysippios,[97] a plant which owes its name to its discoverer—with pulpy figs.

### CHAP. 61. (10.)—APHRODISIACS AND ANTAPHRODISIACS.

Nymphæa heraclia, used as already stated,[98] acts most powerfully as an antaphrodisiac; the same too if taken once every forty days in drink. Taken in drink fasting, or eaten with the food, it effectually prevents the recurrence of libidinous dreams. The root too, used in the form of a liniment and applied to the generative organs, not only represses all prurient desires, but arrests the seminal secretions as well; for which reason, it is said to have a tendency to make flesh and to improve the voice.[99]

The upper part of the root of xiphion,[1] taken in wine, acts as an aphrodisiac. The same is the case too with the wild crethmos,[2] or agrios as it is called, and with horminum,[3] beaten up with polenta.[4]

### CHAP. 62.—THE ORCHIS OR SERAPIAS: FIVE MEDICINAL PROPERTIES. SATYRION.

But there are few plants of so marvellous a nature as the orchis[5] or serapias, a vegetable production with leaves like

[94] The following is the formula of this monstrous piece of absurdity: "Negat Apollo pestem posse crescere cui nuda virgo restinguat."

[95] See B. xxv. c. 94.

[96] See B. xxv. c. 19.

[97] An unknown plant.

[98] In B. xxv. c. 37. This alleged property of the Nymphæa is entirely fabulous.

[99] See B. xx. c. 13.

[1] See B. xxv. cc. 88 and 89.

[2] See B. xxv. c. 96.

[3] See B. xviii. cc. 10 and 22.

[4] See B. xviii. c. 14.

[5] Identified by Littré with the Orchis undulatifolia, and by Fée with the Orchis morio of Linnæus, the Female orchis, or Female fool-stones. Its aphrodisiac properties seem not to have been proved by modern experience, but it is nourishing in the highest degree. Linnæus, however, seems to be of opinion that it may have the effect of an aphrodisiac upon

those of the leek, a stem a palm in height, a purple flower, and a twofold root, formed of tuberosities which resemble the testes in appearance. The larger of these tuberosities, or, as some say, the harder of the two, taken in water, is provocative of lust; while the smaller, or, in other words, the softer one, taken in goat's milk, acts as an antaphrodisiac. Some persons describe this plant as having a leaf like that of the squill, only smoother and softer, and a prickly stem. The roots heal ulcerations of the mouth, and are curative of pituitous discharges from the chest; taken in wine they act astringently upon the bowels.

Satyrion is also a powerful stimulant. There are two kinds of it: the first[6] has leaves like those of the olive, but longer, a stem four fingers in length, a purple flower, and a double root, resembling the human testes in shape. This root swells and increases in volume one year, and resumes its original size the next. The other kind is known as the "satyrios orchis,"[7] and is supposed to be the female plant. It is distinguished from the former one by the distance between its joints, and its more branchy and shrublike form. The root is employed in philtres: it is mostly found growing near the sea. Beaten up and applied with polenta,[8] or by itself, it heals tumours and various other affections of the generative organs. The root of the first kind, administered in the milk of a colonic[9] sheep, causes tentigo; taken in water it produces a contrary effect.

### CHAP. 63.—SATYRION: THREE MEDICINAL PROPERTIES. SATYRION ERYTHRAÏCON: FOUR MEDICINAL PROPERTIES.

The Greeks give the name of "satyrion"[10] to a plant with

cattle. It is the name, no doubt, signifying "testicle," which originally procured for it the repute of being an aphrodisiac.

[6] Identified by Desfontaines with the Orchis pyramidalis, and by Fée with the O. papilionacea of Linnæus. Littré gives the Limodorum abortivum.

[7] He is probably speaking of the Cratægonon of B. xxvii. c. 40, which Fée identifies with the Thelygonon of c. 91 of this Book. He remarks that from the description, the Satyrios orchis cannot have been a Monocotyledon.

[8] See B. xviii. c. 14.

[9] See B. viii. c. 72.

[10] Littré identifies it with the Aceras anthropophora of Linnæus; Desfontaines with the Orchis bifolia, the Butterfly orchis. The Iris florentina

red leaves like those of the lily, but smaller, not more than three of them making their appearance above ground. The stem, they say, is smooth and bare and a cubit in length, and the root double; the lower part, which is also the larger, promoting the conception of male issue, the upper or smaller part, that of female.

They distinguish also another kind of satyrion, by the name of "erythraïcon:"[11] it has seed like that of the vitex,[12] only larger, smooth, and hard; the root, they say, is covered with a red rind, and is white within and of a sweetish taste: it is mostly found in mountainous districts. The root, we are told, if only held in the hand, acts as a powerful aphrodisiac, and even more so, if it is taken in rough, astringent wine. It is administered in drink, they say, to rams and he-goats when inactive and sluggish; and the people of Sarmatia are in the habit of giving it to their stallions when fatigued with covering, a defect to which they give the name of "prosedamum." The effects of this plant are neutralized by the use of hydromel or lettuces.[13]

The Greeks, however, give the general name of "satyrion" to all substances of a stimulating tendency, to the cratægis[14] for example, the thelygonon,[15] and the arrenogonon, plants, the seed of which bears a resemblance to the testes.[16] Persons who carry the pith of branches of tithymalos[17] about them, are rendered more amorous thereby, it is said. The statements are really incredible, which Theophrastus,[18] in most cases an author of high authority, makes in relation to this subject; thus, for instance, he says that by the contact only of a cer-

of Linnæus has also been named; but, though with some doubt, Fée is inclined to prefer the Tulipa Clusiana, or some other kind of tulip.

[11] Mostly identified with the Erythronium dens canis of Linnæus, the Dog's tooth violet. M. Fraäs, however, in his *Synopsis*, p. 279, remarks that the E. dens canis is not to be found in Greece, and is of opinion that the Fritillaria Pyrenaica, the Pyrenean lily, or Fritillary, is meant. The Serapias cordigera of Linnæus has been suggested, and Fée thinks that it is as likely to be the plant meant by Pliny as any other that has been named.

[12] See B. xxiv. c. 38.

[13] See B. xix. c. 38.

[14] "Cratægonon" is most probably the correct reading. See B. xvi. c. 52, and B. xxvii. c. 40.

[15] See c. 91 of this Book.

[16] Of the three plants named, the Thelygonon is the only one to which this assertion will apply. See c. 91 of this Book, and B. xxvii. c. 40.

[17] See B. xxvi. c. 39.

[18] Hist. Plant. B. ix. c. 20.

tain plant, a man has been enabled, in the sexual congress, to repeat his embraces as many as seventy times even! The name and genus, however, of this plant, he has omitted to mention.

### CHAP. 64.—REMEDIES FOR THE GOUT AND DISEASES OF THE FEET.

Sideritis,[19] attached to the body as an amulet, reduces varicose veins, and effects a painless cure. Gout used to be an extremely rare disease, not in the times of our fathers and grandfathers only, but within my own memory even. Indeed, it may justly be considered a foreign complaint; for if it had been formerly known in Italy, it would surely have found a Latin name. It should, however, by no means be looked upon as an incurable malady; for before now, in many instances, it has quitted the patient all at once, and still more frequently, a cure has been effected by proper treatment.

For the cure of gout, roots of panaces[20] are used, mixed with raisins; juice of henbane, or the seed, combined with meal; scordion,[21] taken in vinegar; iberis, as already mentioned;[22] vervain, beaten up with axle-grease; or root of cyclaminos,[23] a decoction of which is good also for chilblains.

As cooling applications for gout, root of xiphion[24] is used; seed of psyllion;[25] hemlock, with litharge or axle-grease; and, at the first symptoms of red gout, or, in other words, hot gout, the plant aizoüm.[26] For either kind of gout, erigeron,[27] with axle-grease, is very useful; leaves of plantago, beaten up with a little salt; or argemonia,[28] pounded with honey. An application of vervain is also remedial, and it is a good plan to soak the feet in a decoction of that plant in water.

### CHAP. 65.—LAPPAGO OR MOLLUGO: ONE REMEDY. ASPERUGO: ONE REMEDY.

Lappago[29] is employed also for this disease; a plant similar to the anagallis,[30] were it not that it is more branchy,

[19] See B. xxv. c. 19.
[20] See B. xxv. c. 11, *et seq.*
[21] See B. xxv. c. 27.
[22] In B. xxv. c. 49. None of these so-called remedies are now employed.
[23] See B. xxv. c. 67.
[24] See B. xxv. cc. 88, 89.
[25] See B. xxv. c. 90.
[26] See B. xxv c. 102.
[27] See B. xxv. c. 106.
[28] See B. xxv. c. 56.
[29] See B. xxiv. c. 116.
[30] See B. xxv. c. 92.

bristling with a greater number of leaves, covered with rugosities, full of a more acrid juice, and possessed of a powerful smell. The kind that resembles anagallis most closely, is known as mollugo.[31] Asperugo[32] is a similar plant, only with a more prickly leaf. The juice of the first is taken daily, in doses of one denarius, in two cyathi of wine.

CHAP. 66.—PHYCOS THALASSION OR SEA-WEED: THREE VARIETIES OF IT. LAPPA BOARIA.

But it is the phycos thalassion, or sea-weed,[33] more particularly, that is so excellent a remedy for the gout. It resembles the lettuce in appearance, and is used as the basis in dyeing tissues with the purple of the murex.[34] Used before it becomes dry, it is efficacious as a topical application not only for gout, but for all diseases of the joints. There are three kinds of it; one with a broad leaf, another with a longer leaf of a reddish hue, and a third with a crisped leaf, and used in Crete for dyeing cloths.[35] All these kinds have similar properties; and we find Nicander prescribing them in wine as an antidote to the venom of serpents even. The seed also of the plant which we have spoken of as "psyllion,"[36] is useful for the cure of gout: it is first steeped in water, and one hemina of the seed is then mixed with two spoonfuls of resin of Colophon, and one spoonful of frankincense. Leaves of mandragora,[37] too, are highly esteemed for this purpose, beaten up with polenta.

(11.) For swellings of the ankles, slime,[38] kneaded up with oil, is wonderfully useful, and for swellings of the joints the juice of the smaller centaury; this last being remarkably good also for diseases of the sinews. Centauris,[39] too, is very useful; and for pains in the sinews of the shoulder-blades, shoulders,

[31] Identified with the Galium mollugo of Linnæus, Great ladies' bedstraw, or Wild bastard madder.

[32] The Asperugo procumbens of Linnæus has been named, but Fée remarks that from its resemblance to Mollugo, the plant must be sought among the Rubiaceæ, and not among the Borragineæ.

[33] "Fucus marinus." See B. xiii. c. 48.

[34] "Qui conchyliis substernitur." See Beckmann's Hist. Inv. Vol. I. p. 36, *Bohn's Ed.*

[35] What Fucus or Laminaria this may have been is now unknown.

[36] See B. xxv. c. 90.

[37] See B. xxv. c. 94.

[38] "Limus aquaticus."

[39] See B. xxv. c. 32.

vertebræ, and loins, an infusion of betony is taken in drink in the same way as for diseases of the liver.[40] Cinquefoil is applied topically to the joints, and a similar use is made of the leaves of mandragora, mixed with polenta,[41] or else the root, beaten up fresh with wild cucumber[42] or boiled in water. For chaps upon the toes, root of polypodion[43] is used; and for diseases of the joints, juice of henbane with axle-grease; amomum,[44] with a decoction of the plant; centunculus,[45] boiled; or fresh moss steeped in water, and attached to the part till it is quite dry.

The root, too, of lappa boaria,[46] taken in wine, is productive of similar effects. A decoction of cyclaminos[47] in water, is curative of chilblains, and all other affections resulting from cold. For chilblains, cotyledon[48] is also employed with axle-grease, leaves of batrachion,[49] and juice of epithymum.[50] Ladanum,[51] mixed with castoreum,[51] and vervain applied with wine, extract corns from the feet.

### CHAP. 67.—MALADIES WHICH ATTACK THE WHOLE OF THE BODY.

Having now finished the detail of the diseases which are perceptible in individual parts of the body, we shall proceed to speak of those which attack the whole of the body. The following I find mentioned as general remedies: in preference to anything else, an infusion of dodecatheos,[52] a plant already described, should be taken in drink, and then the roots of the several kinds[53] of panaces, in maladies of long standing more particularly: seed, too, of panaces should be used for intestinal complaints. For all painful affections of the body we find juice of scordium[54] recommended, as also that of betony: this last, taken in a potion, is particularly excellent for removing a wan and leaden hue of the skin, and for improving its general appearance.

[40] See c. 19 of this Book.
[41] See B. xviii. c. 14.
[42] See B. xx. c. 2.
[43] See c. 37 of this Book.
[44] See B. xii. c. 28.
[45] See B. xxiv. c. 88.
[46] "Ox lappa." Possibly the same as the Philanthropos, or else the Lappa canina, both mentioned in B. xxiv. c. 116.
[47] See B. xxv. c. 67.
[48] See B. xxv. c. 101.
[49] See B. xxv. c. 109.
[50] See B. xii. c. 37, and c. 35 of this Book.
[51] See B. viii. c. 47.
[52] See B. xxv. c. 9.
[53] See B. xxv. c. 11, *et seq.*
[54] See B. xxv. c. 27.

CHAP. 68.—THE GERANION, MYRRHIS, OR MYRTIS; THREE VARIETIES OF IT: SIX REMEDIES.

The plant geranion has the additional names of "myrrhis"[54*] and "myrtis." It is similar to hemlock in appearance, but has a smaller leaf and a shorter stem, rounded, and of a pleasant taste and odour. Such, at all events, is the description given of it by our herbalists; but the Greeks speak of it as bearing leaves a little whiter than those of the mallow, thin downy stems, and branches at intervals some two palms in length, with small heads at their extremities, in the midst of the leaves, resembling the bill[55] of a crane.[56] There is also another[57] variety of this plant, with leaves like those of the anemone, but with deeper incisions, and a root rounded like an apple, sweet, and extremely useful and refreshing[58] for invalids when recovering their strength: this last would almost seem to be the true geranion.

For phthisis this plant is taken, in the proportion of one drachma to three cyathi of wine, twice a day; as also for flatulency. Eaten raw, it is productive of similar effects. The juice of the root is remedial for diseases of the ear; and for opisthotony the seed is taken in drink, in doses of four drachmæ, with pepper and myrrh. Juice of plantago,[59] taken in drink, is curative of phthisis, and a decoction of it is equally good for the purpose. Plantago taken as a food with oil and salt, immediately after rising in the morning, is extremely refreshing; it is prescribed, too, in cases of atrophy, on alternate days. Betony is given with honey, in the form of an electuary, for phthisis, in pieces the size of a bean; agaric, too, is taken in doses of two oboli in raisin wine, or else daucus[60] with the greater centaury in wine. For the cure of phagedæna, a

[54*] Not in reality the same plant as the Geranion; see B. xxiv. c. 97. Littré, however, gives the Erodium moschatum of Linnæus as the synonym of this Geranion myrrhis.

[55] Hence its name, from the Greek γέρανος, a "crane."

[56] This kind of Geranion has been identified with the Geranium molle, or Erodium malacoïdes of Linnæus, the Common dove's-foot crane's bill.

[57] Identified with the Geranium tuberosum of Linnæus.

[58] Fée remarks that all his assertions as to the medicinal properties of the Geranion are erroneous.

[59] See B. xxv. c. 39.

[60] See B. xxv. c. 64.

name given in common to bulimia[61] and to a corrosive kind of ulcer, tithymalos[62] is taken in combination with sesame.

### CHAP. 69.—THE ONOTHERAS OR ONEAR: THREE REMEDIES.

Among the various evils by which the whole of the body in common is afflicted, that of wakefulness is the most common. Among the remedies for it we find panaces[63] mentioned, clymenus,[64] and aristolochia,[65] the odour of the plant being inhaled and the head rubbed with it. Aizoüm, or houseleek, is beneficial, wrapped in black cloth and placed beneath the pillow, without the patient being aware of it. The onotheras[66] too, or onear, taken in wine, has certain exhilarating properties; it has leaves like those of the almond tree, a rose-coloured flower, numerous branches, and a long root, with a vinous smell when dried: an infusion of this root has a soothing effect upon wild beasts even.

For fits of indigestion[67] attended with nausea, betony is taken in drink: used similarly after the evening meal, it facilitates the digestion. Taken in the proportion of one drachma to three cyathi of oxymel, it dispels crapulence. The same is the case, too, with agaric, taken in warm water after eating. Betony is curative of paralysis, it is said; the same, too, with iberis, as already stated.[68] This last is good, too, for numbness of the limbs; the same being the case with argemonia,[69] a plant which disperses those affections which might otherwise necessitate the application of the knife.

### CHAP. 70.—REMEDIES FOR EPILEPSY.

Epilepsy is cured by the root of the panaces which we have spoken[70] of as the "heraclion," taken in drink with sea-calf's rennet, the proportions being three parts of panaces and one of rennet. For the same purpose an infusion of plantago[71] is taken, or else betony or agaric, with oxymel, the former in doses of one drachma, the latter in doses of three oboli; leaves

[61] Voracious appetite—"sine modo esurientium."
[62] See B. xxvi. c. 39.
[63] See B. xxv. cc. 11 and 12.
[64] See B. xxv. c. 33.
[65] See B. xxv. c. 54.
[66] Identified with the Epilobium roseum of Linnæus, Rose-coloured willow-herb.
[67] See c. 25 of this Book.
[68] In B. xxv. c. 49.
[69] See B. xxv. c. 56.
[70] In B. xxv. c. 12.
[71] See B. xxv. c. 39.

of cinquefoil are taken, also, in water. Archezostis[72] is also curative of epilepsy, but it must be taken constantly for a year; root of bacchar,[73] too, dried and powdered, and taken in warm water, in the proportion of three cyathi to one cyathus of coriander; centunculus[74] also, bruised in vinegar, warm water, or honey; vervain, taken in wine; hyssop[75] berries, three in number, pounded and taken in water, for sixteen days consecutively; peucedanum,[76] taken in drink with sea-calf's rennet, in equal proportions; leaves of cinquefoil, bruised in wine and taken for thirty days; powdered betony, in doses of three denarii, with one cyathus of squill vinegar and an ounce of Attic honey; as also scammony, in the proportion of two oboli to four drachmæ of castoreum.

### CHAP. 71.—REMEDIES FOR FEVERS.

Agaric, taken in warm water, alleviates cold fevers: sideritis, in combination with oil, is good for tertian fevers; bruised ladanum[77] also, which is found in corn fields; plantago,[78] taken in doses of two drachmæ, in hydromel, a couple of hours before the paroxysms come on; juice of the root of plantago made warm or subjected to pressure; or else the root itself beaten up in water made warm with a hot iron. Some medical men prescribe three roots of plantago, in three cyathi of water; and in a similar manner, four roots for quartan fevers. When buglossos[79] is beginning to wither, if a person takes the pith out of the stem, and says while so doing, that it is for the cure of such and such a person suffering from fever, and then attaches seven leaves to the patient, just before the paroxysms come on, he will experience a cure, they say.

Fevers too, those which are attended with recurrent cold shiverings more particularly, are cured by administering one drachma of betony, or else agaric, in three cyathi of hydromel. Some medical men recommend three leaves of cinquefoil for tertian, four for quartan, and an increased number for other fevers; while others again prescribe in all cases three oboli of cinquefoil, with pepper, in hydromel.

Vervain, administered in water, is curative of fever, in beasts

[72] See B. xxiii. c. 16.
[73] See B. xxi. c. 16.
[74] See B. xxiv. c. 88.
[75] See B. xxv. c. 87.
[76] See B. xxv. c. 70.
[77] See c. 30 of this Book.
[78] See B. xxv. c. 39.
[79] See B. xxv. c. 40.

of burden even; but care must be taken, in cases of tertian fever, to cut the plant at the third joint, and of quartan fever at the fourth. The seed of either kind of hypericon[80] is taken also for quartan fevers and cold shiverings. Powdered betony modifies these fits, and panaces[81] is of so warming a nature that persons when about to travel amid the snow are recommended to drink an infusion of it, and to rub the body all over with the plant. Aristolochia[81*] also arrests shivering produced by cold.

### CHAP. 72.—REMEDIES FOR PHRENITIS, LETHARGY, AND CARBUNCLES.

Phrenitis is cured by sleep induced by the agency of an infusion of peucedanum[82] in vinegar, poured upon the head, or else by the juice of either kind of anagallis.[82*] On the other hand, when patients are suffering from lethargy, it is with the greatest difficulty that they are aroused; a result which may be effected, they say, by touching the nostrils with juice of peucedanum in vinegar. For the cure of insanity, betony is administered in drink. Panaces[83] brings carbuncles to a head, and makes them break; and they are equally cured by powdered betony applied in water, or else cabbage leaves mixed with frankincense in warm water, and taken in considerable quantities. For a similar purpose, a red-hot coal is extinguished in the patient's presence, and the ashes are taken up with the finger and applied to the sore. Bruised plantago[83*] is also used for the cure of carbuncles.

### CHAP. 73.—REMEDIES FOR DROPSY. ACTE OR EBULUM. CHAMÆACTE.

For the cure of dropsy, tithymalos characias[84] is employed; panaces[85] also; plantago,[86] used as a diet, dry bread being eaten first, without any drink; betony, taken in doses of two drachmæ in two cyathi of ordinary wine or honied wine; agaric or seed of lonchitis,[87] in doses of two spoonfuls, in

[80] See Chapters 53 and 54 of this Book.
[81] See B. xxv. c. 11, *et seq.*
[82] See B. xxv. c. 70.
[83] See B. xxv. c. 11, *et seq.*
[84] See c. 39 of this Book.
[85] See B. xxv. c. 11, *et seq.*
[86] See B. xxv. c. 39.
[87] See B. xxv. c. 88.
[81*] See B. xxv. c. 54.
[82*] See B. xxv. c. 92.
[83*] See B. xxv. c. 39.

water; psyllion,[88] taken in wine; juice of either anagallis;[89] root of cotyledon[90] in honied wine; root of ebulum,[91] fresh gathered, with the mould shaken off, but not washed in water, a pinch in two fingers being taken in one hemina of old wine mulled; root of trefoil, taken in doses of two drachmæ in wine; the tithymalos[92] known as "platyphyllos;" seed of the hypericon,[93] otherwise known as "caros;" the plant called "acte"—the same thing as ebulum[94] according to some—the root of it being pounded in three cyathi of wine, if there are no symptoms of fever, or the seed of it being administered in red wine; a good handful of vervain also, boiled down in water to one half. But of all the remedies for this disease, juice of chamæacte[95] is looked upon as by far the most efficacious.

Morbid or pituitous eruptions are cured by the agency of plantago, or else root of cyclaminos[96] with honey. Leaves of ebulum,[97] bruised in old wine and applied topically, are curative of the disease called "boa," which makes its appearance in the form of red pimples. Juice of strychnos,[98] applied as a liniment, is curative of prurigo.

## CHAP. 74.—REMEDIES FOR ERYSIPELAS.

For the cure of erysipelas, aizoüm[99] is used, or else pounded leaves of hemlock, or root of mandragora;[1] this last being cut into round slices like cucumber and suspended over must,[2] after which it is hung up in the smoke, and then pounded in wine or vinegar. It is a good plan too to use fomentations with myrtle wine: two ounces of mint beaten up in vinegar with one ounce of live sulphur, form a mixture sometimes employed; as also soot mixed with vinegar.

There are several kinds of erysipelas, one in particular which attacks the middle of the body, and is known as "zoster:"[3] should it entirely surround the body, its effects are

[88] See B. xxv. c. 90.
[89] See B. xxv. c. 92.
[90] See B. xxv. c. 101.
[91] See B. xxv. c. 71.
[92] See c. 44 of this Book.
[93] See c. 54 of this Book.
[94] See B. xxv. c. 71.
[95] See B. xxv. c. 71.
[96] See B. xxv. c. 67.
[97] See B. xxv. c. 71.
[98] See B. xxi. c. 105.
[99] See B. xxv. c. 102.
[1] See B. xxv. c. 94.
[2] Or Grape-juice.
[3] The "belt"—known to us as "shingles."

fatal. For this disease, plantago[4] is remedial, mixed with Cimolian[5] chalk; vervain, used by itself; or root of persolata.[6] For other kinds of erysipelas of a spreading nature, root of cotyledon[7] is used, mixed with honied wine; aizoüm also,[8] or juice of linozostis,[9] in combination with vinegar.

### CHAP. 75. (12.)—REMEDIES FOR SPRAINS.

For the cure of sprains, root of polypodion[10] is used, in the form of a liniment: the pain and swelling are modified also by using seed of psyllion;[11] leaves of plantago[12] beaten up with a little salt; seed of verbascum,[13] boiled in wine and pounded; or hemlock with axle-grease. Leaves of ephemeron[14] are applied topically to tumours and tuberosities, so long as they are capable of being dispersed.

### CHAP. 76.—REMEDIES FOR JAUNDICE.

It is upon the eyes in particular that jaundice is productive of so remarkable an effect; the bile penetrating between the membranes, so extremely delicate as they are and so closely united. Hippocrates[15] tells us that the appearance of jaundice on or after the seventh day in fevers is a fatal symptom; but I am acquainted with some instances in which the patients survived after having been reduced to this apparently hopeless state. We may remark also, that jaundice sometimes comes on without fever supervening. It is combated by taking the greater centaury,[16] as already mentioned, in drink; agaric, in doses of three oboli in old wine; or leaves of vervain, in doses of three oboli, taken for four consecutive days in one hemina of mulled wine. But the most speedy cure of all is effected by using juice of cinquefoil, in doses of three cyathi, with salt and honey. Root of cyclaminos[17] is also taken in drink in doses of three drachmæ, the patient sitting in a warm room free from all cold and draughts, the infusion expelling the bile by its action as a sudorific.

[4] See B. xxv. c. 39.
[5] See B. xxxv. c. 57.
[6] See B. xxv. c. 66.
[7] See B. xxv. c. 101.
[8] See B. xxv. c. 102.
[9] See B. xxv. c. 18.
[10] See c. 37 of this Book.
[11] See B. xxv. c. 90.
[12] See B. xxv. c. 39.
[13] See B. xxv. c. 73.
[14] See B. xxv. c. 107.
[15] B. iv. cc. 62, 64.
[16] See B. xxv. c. 30.
[17] See B. xxv. c. 67.

Leaves of tussilago[18] are also used in water for this purpose; the seed of either kind of linozostis,[19] sprinkled in the drink, or made into a decoction with chick-pease or wormwood: hyssop berries taken in water; the plant lichen,[20] all other vegetables being carefully abstained from while it is being used; polythrix,[21] taken in wine; and struthion,[22] in honied wine.

### CHAP. 77.—REMEDIES FOR BOILS.

There are boils also, known as "furunculi,"[23] which make their appearance indiscriminately on all parts of the body, and are productive of the greatest inconvenience: sometimes indeed, when the constitution is exhausted, they are fatal in their effects. For their cure, leaves of pycnocomon[24] are employed, beaten up with polenta,[25] if the boil has not come to a head. They are dispersed also by an application of leaves of ephedron.[26]

### CHAP. 78.—REMEDIES FOR FISTULA.

Fistulas, too, insidiously attack all parts of the body, owing to unskilfulness on the part of medical men in the use of the knife. The smaller centaury[27] is used for their cure, with the addition of lotions[28] and boiled honey: juice of plantago[29] is also employed, as an injection; cinquefoil, mixed with salt and honey; ladanum,[30] combined with castoreum;[31] cotyledon,[32] applied hot with stag's marrow; pith of the root of verbascum[33] reduced to a liquid state in the shape of a lotion, and injected; root of aristolochia;[34] or juice of tithymalos.[35]

### CHAP. 79.—REMEDIES FOR ABSCESSES AND HARD TUMOURS.

Abscesses and inflammations are cured by an application of leaves of argemonia.[36] For indurations and gatherings of all descriptions a decoction of vervain or cinquefoil in vinegar is

[18] Or Bechion. See B. xxiv. c. 85.
[19] See B. xxv. c. 19.
[20] See c. 10 of this Book.
[21] See B. xxv. c. 83.
[22] See B. xix. c. 18.
[23] "Little thieves," literally.
[24] See c. 36 of this Book.
[25] See B. xviii. c. 14.
[26] See c. 83 of this Book.
[27] See B. xxv. c. 31.
[28] "Collyriis."
[29] See B. xxv. c. 39
[30] See B. xii. c. 37, and c. 30 of this Book.
[31] See B. viii. c. 47.
[32] See B. xxv. c. 101.
[33] See B. xxv. c. 73.
[34] See B. xxv. c. 54.
[35] See c. 39 of this Book.
[36] See B. xxv. c. 56.

used; leaves or root of verbascum;[37] a liniment made of wine and hyssop; root of acoron,[38] a decoction of it being used as a fomentation; or else aizoüm.[39] Contusions also, hard tumours, and fistulous abscesses are treated with illecebra.[40]

All kinds of foreign substances which have pierced the flesh are extracted by using leaves of tussilago,[41] daucus,[42] or seed of leontopodium[43] pounded in water with polenta.[44] To suppurations, leaves of pycnocomon[45] are applied, beaten up with polenta, or else the seed of that plant, or orchis.[46] An application of root of satyrion[47] is said to be a most efficacious remedy for deep-seated diseases of the bones. Corrosive ulcers and all kinds of gatherings are treated with sea-weed,[48] used before it has dried. Root, too, of alcima[49] disperses gatherings.

### CHAP. 80.—REMEDIES FOR BURNS.

Burns are cured by the agency of plantago,[50] or of arction,[51] so effectually indeed as to leave no scar. The leaves of this last plant are boiled in water, beaten up, and applied to the sore. Roots of cyclaminos[52] are used, in combination with aizoüm;[53] the kind of hypericon also, which we have mentioned as being called "corissum."[54]

### CHAP. 81.—REMEDIES FOR DISEASES OF THE SINEWS AND JOINTS.

For diseases of the sinews and joints, plantago,[55] beaten up with salt, is a very useful remedy, or else argemonia,[56] pounded with honey. Patients affected with spasms or tetanus are rubbed with juice of peucedanum.[57] For indurations of the sinews, juice of ægilops[58] is employed, and for pains in those parts of the body erigeron[59] or epithymum,[60] used as a liniment,

[37] See B. xxv. c. 73.
[38] See B. xxv. c. 100.
[39] See B. xxv. c. 102.
[40] See B. xxv. c. 103.
[41] See B. xxiv. c. 85.
[42] See B. xxv. c. 64.
[43] See B. xxvii. c. 72.
[44] See B. xviii. c. 14.
[45] See Chapters 36 and 77 of this Book.
[46] See c. 62 of this Book.
[47] See c. 62 of this Book.
[48] See c. 66 of this Book.
[49] Probably the "Alcea" of B. xxvii. c. 6. See also B. xxv. c. 77.
[50] See B. xxv. c. 39.
[51] See B. xxvii. c. 16.
[52] See B. xxv. c. 67.
[53] See B. xxv. c. 102.
[54] Or "Corison." See c. 53 of this Book.
[55] See B. xxv. c. 39.
[56] See B. xxv. c. 56.
[57] See B. xxv. c. 70.
[58] See B. xxv. c. 93.
[59] See B. xxv. c. 106.
[60] See c. 35 of this Book.

with vinegar. In cases of spasms and opisthotony, it is an excellent plan to rub the part affected with seed of the hypericon known as "caros,"[61] and to take the seed in drink. Phrynion,[62] it is said, will effect a cure even when the sinews have been severed, if applied instantaneously, bruised or chewed. For spasmodic affections, fits of trembling, and opisthotony, root of alcima[63] is administered in hydromel; used in this manner, it has a warming effect when the limbs are benumbed with cold.

CHAP. 82.—REMEDIES FOR HÆMORRHAGE.

The red seed of the plant called "pæonia"[64] arrests hæmorrhage; the root also is possessed of similar properties. But it is clymenus[65] that should be employed, when there are discharges of blood at the mouth or nostrils, from the bowels, or from the uterus. In such cases, lysimachia[66] also is taken in drink, applied topically, or introduced into the nostrils; or else seed of plantago,[67] or cinquefoil, is taken in drink, or employed in the form of a liniment. Hemlock seed is introduced into the nostrils, for discharges of blood there, or else it is pounded and applied in water; aizoüm[68] also, and root of astragalus.[69] Isehæmon[70] and achillea[71] likewise arrest hæmorrhage.

CHAP. 83. (13.)—HIPPURIS, OTHERWISE CALLED EPHEDRON, ANABASIS, OR EQUISÆTUM; THREE KINDS OF IT: EIGHTEEN REMEDIES.

Equisætum, a plant called "hippuris" by the Greeks, and which we have mentioned in terms of condemnation, when treating of meadow lands[72]—it being, in fact, a sort of hair of the earth, similar in appearance to horse-hair[73]—is used by runners for the purpose of diminishing[74] the spleen. For this

[61] See c. 53 of this Book.
[62] See B. xxv. c. 76.
[63] See Note 49 above.
[64] Our peony. See B. xxv. c. 10.
[65] See B. xxv. c. 33.
[66] See B. xxv. c. 35.
[67] See B. xxv. c. 39.
[68] See B. xxv. c. 102.
[69] See c. 29 of the present Book.
[70] See B. xxv. c. 45.
[71] See B. xxv. c. 19.
[72] In B. xviii. c. 67; where it is called "equisætis." M. Fräas identifies it with the Equisætum limosum of Linnæus.
[73] Whence its name "equisætum."
[74] See B. xi. c. 30.

purpose it is boiled down in a new earthen vessel to one third, the vessel being filled to the brim, and the decoction taken in doses of one hemina for three successive days. It is strictly forbidden, however, to eat any food of a greasy nature the day before taking it.

Among the Greeks there are various opinions in relation to this plant. According to some, who give it the same name of "hippuris," it has leaves like those of the pine tree, and of a swarthy hue; and, if we are to believe them, it is possessed of virtues of such a marvellous nature, that if touched by the patient only, it will arrest hæmorrhage. Some authorities call it "hippuris," others, again, "ephedron," and others "anabasis;" and they tell us that it grows near trees, the trunks of which it ascends, and hangs down therefrom in numerous tufts of black, rush-like hair, much like a horse's tail in appearance. The branches, we are told, are thin and articulated, and the leaves, few in number, small, and thin, the seed round, and similar to coriander in appearance, and the root ligneous: it grows, they say, in plantations more particularly.

This plant is possessed of astringent properties. The juice of it, kept in the nostrils, arrests bleeding therefrom, and it acts astringently upon the bowels. Taken in doses of three cyathi, in sweet wine, it is a cure for dysentery, is an efficient diuretic, and is curative of cough, hardness of breathing, ruptures, and serpiginous affections. For diseases of the intestines and bladder, the leaves are taken in drink; it has the property, also, of reducing ruptures of the groin.

The Greek writers describe another[75] hippuris, also, with shorter tufts, softer and whiter. This last, they say, is remarkably good for sciatica, and, applied with vinegar, for wounds, it having the property of stanching the blood. Bruised nymphæa[76] is also applied to wounds. Peucedanum[77] is taken in drink with cypress seed, for discharges of blood at the mouth or by the lower passages. Sideritis[78] is possessed of such remarkable virtues, that applied to the wound of a gladiator just inflicted, it will stop the flow of blood; an effect which is equally produced by an application of charred fennel-giant, or of the

[75] Identified by Littré with the Ephedra fragilis of Linnæus. Fée gives as its synonym the Equisætum arvense of Linnæus, the Common horse-tail, or Corn horse-tail.

[76] See B. xxv. c. 37.

[77] See B. xxv. c. 70.

[78] See B. xxv. c. 15.

ashes of that plant. For a similar purpose, also, the fungus that is found growing near the root of fennel-giant is still more efficacious.

### CHAP. 84.—STEPHANOMELIS.

For bleeding at the nostrils, seed of hemlock, pounded in water, is considered efficacious, as also stephanomelis,[79] applied with water. Powdered betony, taken with goat's milk, or bruised plantago,[80] arrests discharges of blood from the mamillæ. Juice of plantago is administered to patients when vomiting blood. For local discharges of blood, an application of root of persolata[81] with stale axle-grease is highly spoken of.

### CHAP. 85.—REMEDIES FOR RUPTURES AND CONVULSIONS. ERYSITHALES: ONE REMEDY.

For ruptures, convulsions, and falls with violence, the greater centaury[82] is used; root of gentian pounded or boiled; juice of betony—this last being employed also for ruptures produced by straining the vocal organs or sides—panaces;[83] scordium;[84] or aristolochia[85] taken in drink. For contusions and falls, agaric is taken, in doses of two oboli, in three cyathi of honied wine, or if there are symptoms of fever, hydromel; the verbascum,[86] also, with a golden flower; root of acoron;[87] the several varieties of aizoüm,[88] the juice of the larger kind being particularly efficacious; juice of symphytum,[89] or a decoction of the root of that plant; daucus,[90] unboiled; erysithales,[91] a plant with a yellow flower and a leaf like that of acanthus, taken in wine; chamærops;[92] irio,[93] taken in pottage; plantago[94] taken any way, as also * * * *

[79] Dalechamps identifies it with the Potentilla anserina of Linnæus, Silver-weed, or White tansy; but on insufficient grounds, Fée thinks.
[80] See B. xxv. c. 39.
[81] See B. xxv. c. 66.
[82] See B. xxv. c. 30.
[83] See B. xxv. c. 11, *et seq.*
[84] See B. xxv. c. 27.
[85] See B. xxv. c. 54.
[86] See B. xxv. c. 73.
[87] See B. xxv. c. 100.
[88] See B. xxv. c. 102.
[89] See B. xxvii. c. 24.
[90] See B. xxv. c. 64.
[91] C. Bauhin identifies it with the Cnicus erysithales of Willdenow; but that plant, Fée says, was unknown to the Greeks.
[92] See B. xxiv. c. 80.
[93] See B. xviii. c. 10.
[94] See B. xxv. c. 39.

CHAP. 86.—REMEDIES FOR PHTHIRIASIS.

Phthiriasis is a disease which proved fatal to the Dictator Sylla,[95] and which developes itself by the production of insects in the blood, which ultimately consume the body. It is combated by using the juice of Taminian grapes[96] or of hellebore, the body being rubbed all over with it, in combination with oil. A decoction of Taminian grapes in vinegar, has the effect, also, of ridding the clothes of these vermin.

CHAP. 87. (14.)—REMEDIES FOR ULCERS AND WOUNDS.

Of ulcers there are numerous kinds, which are treated in various ways. The root of all the varieties of panaces[97] is used as an application for running ulcers, in warm wine.

That which we have spoken of as the "chironion"[98] is particularly good as a desiccative: bruised with honey, it opens tumours, and is useful for serpiginous ulcers, the cure of which appears more than doubtful; in which case it is amalgamated with flower[99] of copper tempered with wine, either the seed, flower, or root, being employed for the purpose. Mixed with polenta[1] it is good for old wounds. The following are also good detergents for wounds: heraclion siderion,[2] apollinaris,[3] psyllion,[4] tragacantha,[5] and scordotis[6] mixed with honey. Powdered scordotis, applied by itself, consumes fleshy excrescences on the body. Polemonia[7] is curative of the malignant ulcer known as "cacoëthes." The greater centaury,[8] sprinkled in powder, or applied in the form of a liniment, or the leaves of the smaller[9] centaury, boiled or pounded, act as a detergent upon inveterate ulcers, and effect a cure. To recent wounds, the follicules of the clymenus[10] are applied. Gentian is applied to serpiginous ulcers, the root being bruised or else boiled down in water to the consistency of honey; the juice also of the plant is employed. For wounds, a kind of lycium[11] is prepared from gentian.

95 See B. xi. c. 39, and B. xx. c. 32.
96 See B. xxiii. c. 13.
97 See B. xxv. c. 11, *et seq.*
98 See B. xxv. c. 15.
99 For a description of this substance, see B. xxxiv. c. 24.
1 See B. xviii. c. 14.
2 See B. xxv. c. 15.
3 See B. xxv. c. 17.
4 See B. xxv. c. 90.
5 See B. xiii. c. 36.
6 See B. xxv. c. 27.
7 See B. xxv. c. 28.
8 See B. xxv. c. 30.
9 See B. xxv. c. 31.
10 See B. xxv. c. 33.
11 See B. xxiv. c. 77.

Lysimachia[12] is curative of recent wounds, and plantago[13] of all kinds of ulcerations, those on females, infants, and aged persons more particularly. This plant, when softened by the action of fire, is better still: in combination with cerate it acts as a detergent upon ulcers with indurated edges, and arrests the progress of corrosive sores: when applied bruised, it should be covered with its own leaves. Chelidonia[14] also acts as a desiccative upon suppurations, abscesses, and fistulous ulcers; indeed, it is so remarkably useful for the cure of wounds, as to be employed as a substitute for spodium[15] even. In cases where the cure is almost hopeless, it is applied with axle-grease. Dittany,[16] taken internally, causes arrows to fall from the flesh; used as a liniment, it has the effect of extracting other kinds of pointed weapons: the leaves are taken in the proportion of one obolus to one cyathus of water. Nearly equal in its efficacy is pseudo-dictamnon:[17] they are both of them useful, also, for dispersing suppurations.

Aristolochia[18] cauterizes putrid sores, and, applied with honey, acts as a detergent upon sordid ulcers. At the same time also, it removes maggots, and extracts hard cores, and all foreign bodies adhering to the flesh, arrows more particularly, and, applied with resin, splintered bones. Used by itself, it fills the cavities made by ulcers with new flesh, and, employed with iris,[19] in vinegar, it closes recent wounds. Vervain, or cinquefoil with salt and honey, is remedial for ulcers of long standing. Roots of persolata[20] are applied to recent wounds inflicted with iron, but for old wounds, it is the leaves that are employed: in both cases, in combination with axle-grease, the sore being then covered with the leaves of the plant. Damasonium[21] is used for wounds the same way as for scrofula,[22] and leaves of verbascum[23] are employed with vinegar or wine.

Vervain is useful for all kinds of callosities or putrid sores; root of nymphæa heraclia[24] is curative of running ulcers; and

[12] See B. xxv. c. 35.
[13] See B. xxv. c. 39.
[14] See B. xxv. c. 50.
[15] See B. xix. c. 4, B. xxiii. c. 35, and B. xxxiv. c. 52.
[16] See B. xxv. c. 53.
[17] Bastard dittany. See B. xxv. c. 53.
[18] See B. xxv. c. 54.
[19] See B. xxi. c. 19.
[20] See B. xxv. c. 66.
[21] See B. xxv. c. 77.
[22] See c. 12 of this Book.
[23] See B. xxv. c. 73.
[24] See B. xxv. c. 37.

the same is the case with root of cyclaminos,[25] either used by itself, or in combination with vinegar or honey. This last root is useful also for the cure of steatomatous tumours, and hyssop for that of running ulcers; an effect equally produced by peucedanum,[26] a plant which exercises so powerful an influence upon fresh wounds, as to cause exfoliation even of the bones. The two varieties of anagallis[27] are possessed of similar properties, and act as a check upon the corrosive sores known as "nomæ" and upon defluxions; they are useful also in cases of recent wounds, those of aged people in particular. Fresh leaves of mandragora,[28] applied with cerate, are curative of apostemes and sordid ulcers: the root too is used, with honey or oil, for wounds.

Hemlock, incorporated with flour of winter wheat[29] by the agency of wine—as also the plant aizoüm[30]—is curative of herpetic eruptions, and corrosive or putrid sores. Erigeron[31] is employed for ulcers which breed maggots. Root of astragalus[32] is used for the cure of recent wounds or of ulcers of long standing; and upon these last either kind of hypocisthis[33] acts as a detergent. Seed of leontopodium,[34] bruised in water and applied with polenta,[35] extracts pointed weapons from the flesh: a result equally produced by using seed of pycnocomon.[36] The tithymalos characias[37] supplies its juice for the cure of gangrenes, phagedænic sores, and putrid ulcers; or else a decoction is made of the branches with polenta and oil. Roots of orchis[38] have a similar effect; in addition to which, applied, either dry or fresh gathered, with honey and vinegar, they are curative of the ulcer known as "cacoëthes." Onothera[39] also, used by itself, is curative of ulcers when rapidly gaining head.

The people of Scythia employ scythice[40] for the treatment of wounds. For carcinoma, argemonia,[41] applied with honey, is extremely efficacious. For sores that have prematurely closed, root of asphodel is boiled, in manner already[42] stated.

[25] See B. xxv. c. 67.
[26] See B. xxv. c. 70.
[27] See B. xxv. c. 92.
[28] See B. xxv. c. 94.
[29] "Siligo." See B. xviii. c. 20.
[30] See B. xxv. c. 102.
[31] See B. xxv. c. 106.
[32] See c. 29 of this Book.
[33] See c. 31 of this Book.
[34] See B. xxvii. c. 72.
[35] See B. xxviii. c. 14.
[36] See c. 36 of this Book.
[37] See c. 39 of this Book.
[38] See c. 62 of this Book.
[39] See c. 69 of this Book.
[40] Our "liquorice," see B. xxv. c. 43.
[41] See B. xxv. c. 66.
[42] In B. xxii. c. 33.

and then beaten up with polenta,[43] and applied. For all kinds of wounds apollinaris[44] is very useful. Root of astragalus,[45] reduced to powder, is good for running ulcers; the same, too, with callithrix,[46] boiled in water. For blisters, more particularly when caused by the shoes, vervain is used, as also pounded lysimachia,[47] or nymphæa[48] dried and powdered; but when they have assumed the form of inveterate ulcers, polythrix[49] will be found more serviceable.

### CHAP. 88.—POLYCNEMON: ONE REMEDY.

Polycnemon[50] is a plant which resembles cunila bubula;[51] it has a seed like that of pennyroyal, a ligneous stem with numerous articulations, and odoriferous umbels, with a pleasant though pungent smell. This plant is chewed and applied to wounds inflicted with iron, the application being removed at the end of four days. Symphyton[52] causes sores to cicatrize with the greatest rapidity; the same, too, with sideritis,[53] which is applied in combination with honey. The seed and leaves of verbascum,[54] boiled in wine and pounded, are used for the extraction of all foreign substances adhering to the body; and a similar use is made of leaves of mandragora[55] mixed with polenta,[56] and roots of cyclaminos[57] with honey. Leaves of trixago,[58] bruised in oil, are used for ulcers of a serpiginous nature more particularly, as also sea-weed bruised with honey. Betony, with the addition of salt, is employed for the cure of carcinomatous sores and inveterate blisters on the neck.

### CHAP. 89.—REMEDIES FOR WARTS, AND APPLICATIONS FOR THE REMOVAL OF SCARS.

Argemonia[59] with vinegar, or root of batrachion,[60] removes warts; this last having the effect also of bringing off malformed

[43] See B. xviii. c. 14.
[44] See B. xxv. c. 17.
[45] See c. 29 of this Book.
[46] See B. xxii. c. 30, and B. xxv. c. 86.
[47] See B. xxv. c. 35.
[48] See B. xxv. c. 37.
[49] See Note 46 above.
[50] Desfontaines identifies it with the Mentha cervina, or Stag mint.
[51] See B. xix. c. 50, and B. xx. c. 61.
[52] See B. xxvii. c. 24.
[53] See B. xxv. c. 19.
[54] See B. xxv. c. 73.
[55] See B. xxv. c. 94.
[56] See B. xviii. c. 14.
[57] See B. xxv. c. 67.
[58] See B. xxiv. c. 80.
[59] See B. xxv. c. 56.
[60] See B. xxv. c. 109.

nails. The juice or the leaves, applied topically, of either kind of linozostis,[61] remove warts. All the varieties of tithymalos[62] are efficacious for the removal of every kind of wart, as also of hangnails[63] and wens. Ladanum[64] imparts a fresh colour and seemly appearance to scars.

(15.) The traveller who carries artemisia[65] attached to his person, or elelisphacus,[66] will never be sensible of lassitude, it is said.

### CHAP. 90.—REMEDIES FOR FEMALE DISEASES.

One great remedy for all female diseases in common, is the black seed of the herbaceous plant pæonia,[67] taken in hydromel: the root also is an effectual emmenagogue. Seed of panaces,[68] mixed with wormwood, acts as an emmenagogue and as a sudorific: the same, too, with scordotis,[69] taken internally or applied topically. Betony, in doses of one drachma to three cyathi of wine, is taken for various affections of the uterus, as also directly after child-birth. Excessive menstruation is arrested by a pessary of achillea,[70] or else a sitting-bath composed of a decoction of that plant. Seed of henbane in wine is used as a liniment for diseases of the mamillæ, and the root is employed in the form of a plaster for uterine affections; chelidonia,[71] too, is applied to the mamillæ.

Roots of panaces,[72] applied as a pessary, bring away the after-birth and the dead fœtus, and the plant itself, taken in wine, or used as a pessary with honey, acts as a detergent upon the uterus. Polemonia,[73] taken in wine, brings away the after-birth; used as a fumigation, it is good for suffocations of the uterus. Juice of the smaller centaury,[74] taken in drink, or employed as a fomentation, acts as an emmenagogue. The root also of the larger centaury, similarly used, is good for pains in the uterus; scraped and used as a pessary, it expels the dead fœtus. For pains of the uterus, plantago[75] is applied as a pessary, in wool, and for hysterical suffocations, it is taken in

[61] See B. xxv. c. 18.
[62] See c. 39 of this Book, *et seq.*
[63] "Pterygia."
[64] See B. xii. c. 37 and c. 30 of this Book.
[65] See B. xxv. c. 81.
[66] See B. xxii. c. 71.
[67] See B. xxv. c. 10.
[68] See B. xxv. c. 11, *et seq.*
[69] See B. xxv. c. 27.
[70] See B. xxv. c. 19.
[71] See B. xxv. c. 50.
[72] See B. xxv. c. 11, *et seq.*
[73] See B. xxv. c. 28.
[74] See B. xxv. c. 31.
[75] See B. xxv. c. 39.

drink. But it is dittany that is of the greatest efficacy in cases of this description; it acts as an emmenagogue, and is an expellent of the fœtus when dead or lying transversely in the uterus. In these cases the leaves of it are taken, in doses of one obolus, in water: indeed so active is it in its effects that ordinarily it is forbidden to be introduced into the chamber of a woman lying-in. Not only is it thus efficacious when taken in drink, but even when applied topically or used as a fumigation. Pseudodictamnum[76] possesses pretty nearly the same virtues, but it acts as an emmenagogue also, boiled in doses of one denarius in unmixed wine. Aristolochia,[77] however, is employed for a greater number of purposes: in combination with myrrh and pepper, either taken in drink or used as a pessary, it acts as a powerful emmenagogue, and brings away the dead fœtus and the after-birth. This plant, the smaller kind in particular, used either as a fomentation, fumigation, or pessary, acts as a preventive of procidence of the uterus.

Hysterical suffocations and irregularities of the catamenia are treated with agaric, taken in doses of three oboli, in one cyathus of old wine: vervain is used also in similar cases, as a pessary, with fresh hog's lard; or else antirrhinum,[78] with rose oil and honey. Root of Thessalian nymphæa,[79] used as a pessary, is curative of pains in the uterus; taken in red wine, it arrests uterine discharges. Root of cyclaminos,[80] on the other hand, taken in drink and employed as a pessary, acts as an emmenagogue: a decoction of it, used as a sitting-bath, cures affections of the bladder. Cissanthemos,[81] taken in drink, brings away the after-birth, and is curative of diseases of the uterus. The upper part of the root of xiphion,[82] taken in doses of one drachma, in vinegar, promotes menstruation. A fumigation of burnt peucedanum[83] has a soothing effect in cases of hysterical suffocation. Psyllion,[84] taken in the proportion of one drachma to three cyathi of hydromel, is particularly good for promoting the lochial discharge. Seed of mandragora,[85] taken in drink, acts as a detergent upon the

[76] "Bastard dittany." See B. xxv. c. 53.
[77] See B. xxv. c. 54.
[78] See B. xxv. c. 80.
[79] See B. xxv. c. 37.
[80] See B. xxv. c. 67.
[81] See B. xxv. c. 68.
[82] See B. xxv. c. 88.
[83] See B. xxv. c. 70.
[84] See B. xxv. c. 90.
[85] See B. xxv. c. 94.

uterus; the juice, employed in a pessary, promotes menstruation and expels the dead fœtus. The seed of this plant, used with live sulphur,[86] arrests menstruation when in excess; while batrachion,[87] on the other hand, acts as an emmenagogue. This last plant is either used as an article of food, or is taken in drink: in a raw state, as already stated,[88] it has a burning flavour; but when cooked, the taste of it is greatly improved by the addition of salt, oil, and cummin. Daucus,[89] taken in drink, promotes the catamenia, and is an expellent of the after-birth in a very high degree. Ladanum,[90] used as a fumigation, acts as a corrective upon the uterus, and is employed topically for pains and ulcerations of that organ.

Scammony, taken in drink or used as a pessary, is an expellent of the dead fœtus. Either kind of hypericon,[91] used as a pessary, promotes menstruation: but for this purpose it is crethmos,[92] according to Hippocrates, that is the most efficacious, the seed or root of it being taken in wine.[93] * * * of the outer coat brings away the after-birth. This plant, taken in water, is good for hysterical suffocations; root of geranion[94] also, which is peculiarly useful for the after-birth, and for inflation of the uterus. Hippuris,[95] taken in drink or applied as a pessary, acts as a detergent upon the uterus: polygonos,[96] taken in drink, promotes menstruation; and the same with root of alcima.[97] Leaves of plantago,[98] and agaric in hydromel, have a similar effect. Artemisia,[99] bruised and applied as a pessary, with oil of iris,[1] figs, or myrrh, is curative of diseases of the uterus; the root, too, of this plant, taken in drink, is so strongly purgative as to expel the dead fœtus even. A decoction of the branches, used as a sitting-bath, promotes menstruation and brings away the after-birth; the

[86] See B. xxxv. c. 50.
[87] See B. xxv. c. 109.
[88] In B. xxv. c. 109.
[89] See B. xxv. c. 64.
[90] See B. xii. c. 37, and c. 30 of this Book.
[91] See Chapters 53 and 54 of this Book.
[92] See B. xxv. c. 96.
[93] Probably the word "juice," or "decoction," is lost here.
[94] See c. 68 of this Book.
[95] See Chapters 20 and 83 of this Book.
[96] See B. xxvii. c. 91.
[97] The same as "Alcea" probably; see Chapters 79 and 81 of this Book. Also B. xxvii. c. 6.
[98] See B. xxv. c. 39.
[99] See B. xxv. c. 36.
[1] See B. xiii. c. 2, and B. xxi. cc. 19, 83.

same, too, with the leaves, taken in doses of one drachma in drink. The leaves, if applied to the lower regions of the abdomen with barley-meal, will prove equally efficacious.

Acoron[2] is very useful for internal complaints of females; as also the two varieties of conyza,[3] and crethmos.[4] Either kind of anthyllis,[5] taken in wine, is remarkably good for uterine affections, griping pains in that organ, and retardations of the after-birth. Callithrix,[6] applied as a fomentation, is curative of affections of the vagina: it removes scaly eruptions[7] also of the head, and, beaten up in oil, it stains the hair. Geranion,[8] taken in white wine, or hypocisthis[9] in red, arrests all uterine discharges. Hyssop modifies hysterical suffocations. Root of vervain, taken in water, is a most excellent remedy for all accidents incident to, or consequent upon, delivery. Some persons mix bruised cypress seed with peucedanum[10] in red wine. Seed, too, of psyllion,[11] boiled in water and taken warm, has a soothing effect upon all defluxions of the uterus. Symphyton,[12] bruised in wine, promotes menstruation. Juice of scordotis,[13] in the proportion of one drachma to four cyathi of hydromel, accelerates delivery. Leaves of dittany are given for the same purpose, in water, with remarkable success. It is a well-known fact, too, that these leaves, to the extent of a single obolus even, will bring away the fœtus instantaneously, even when dead, without the slightest inconvenience to the patient. Pseudodictamnum[14] is productive of a somewhat similar effect, but not in so marked a degree: cyclaminos,[15] too, attached as an amulet; cissanthemos,[16] taken in drink; and powdered betony, in hydromel.

### CHAP. 91.—ARSENOGONON: ONE MEDICINAL PROPERTY. THELYGONON: ONE MEDICINAL PROPERTY.

Arsenogonon[17] and thelygonon are plants, both of them,

[2] See B. xxv. c. 100.
[3] See B. xxi. c. 29.
[4] See B. xxv. c. 96.
[5] See B. xxi. c. 103.
[6] See B. xxii. c. 30, and B. xxv. c. 86.
[7] "Albugines."
[8] See c. 68 of this Book.
[9] See c. 31 of this Book.
[10] See B. xxv. c. 70.
[11] See B. xxv. c. 90.
[12] See B. xxvii. c. 24.
[13] See B. xxv. c. 27.
[14] See B. xxv. c. 53.
[15] See B. xxv. c. 67.
[16] See B. xxv. c. 68.
[17] These two plants, the names of which signify "begetting males,"

with clusters resembling the blossoms of the olive, but paler, and a white seed like that of the poppy. By taking thelygonon in drink, they say, the conception of female issue is ensured. Arsenogonon differs from it in the seed, which resembles that of the olive, but in no other respect. By taking this last plant in drink, male issue may be ensured—that is, if we choose to believe it. Some persons, however, assert that both plants resemble ocimum,[18] but that the seed of arsenogonon is double, and resembles the testes in appearance.

### CHAP. 92.—MASTOS: ONE REMEDY.

Aizoüm, which we have spoken of under the name of digitellus,[19] is the great specific for diseases of the mamillæ. The milk is increased by taking erigeron[20] in raisin wine, or else sonchos[21] boiled with spelt. The plant known as "mastos,"[22] applied topically, removes the hairs from the mamillæ,[23] which make their appearance after child-birth: it has the effect also of dispersing scaly crusts[24] upon the face, and other cutaneous affections. Gentian also, nymphæa heraclia[25] employed in a liniment, and root of cyclaminos,[26] remove all blemishes of the skin. Seeds of cacalia,[27] mixed with melted wax, plump out the skin of the face and make wrinkles disappear. Root of acoron,[28] also, removes all spots upon the skin.

### CHAP. 93.—APPLICATIONS FOR THE HAIR. LYSIMACHIA. OPHRYS.

Lysimachia[29] imparts a blonde tint[30] to the hair, and the hypericon,[31] otherwise called "corisson," makes it black. The same too, with ophrys,[32] a plant with indentations, which re-

and "begetting females," are identified by Fée as the male and the female of the same plant, the Mercurialis tomentosa of Linnæus, the Woolly mercury. Littré gives the Mercurialis perennis of Linnæus, Dog's mercury; and Desfontaines identifies them with the Thelygonum cynocrambe.

[18] See B. xxi. c. 60.
[19] In B. xxv. c. 102.
[20] See B. xxv. c. 106.
[21] See B. xxii. c. 44.
[22] Meaning the "breast" plant. It has not been identified.
[23] See B. xxxii. c. 10.
[24] "Testas."
[25] See B. xxv. c. 37.
[26] See B. xxv. c. 67.
[27] See B. xxv. c. 85.
[28] See B. xxv. c. 100.
[29] See B. xxv. c. 35.
[30] The most highly esteemed among the Romans of all colours of the hair.
[31] See Chapter 53 of this Book.
[32] The "eye-brow" plant. It is identified by Fée with the Ophrys

sembles the cabbage, but has only two leaves. Polemonia,[33] too, boiled in oil, imparts blackness to the hair.

As for depilatories, I reckon them in the number of cosmetics, fit for women only, though men use them now-a-days. For this purpose archezostis[34] is looked upon as highly efficacious, as also juice of tithymalos,[35] applied with oil every now and then in the sun, or after pulling out the hairs. Hyssop, applied with oil, heals itch-scab in beasts, and sideritis[36] is particularly useful for quinzy in swine.

But let us now turn to the remaining plants of which we have to speak.

SUMMARY.—Remedies, narratives, and observations, one thousand and nineteen.

ROMAN AUTHORS QUOTED.—M. Varro,[37] C. Valgius,[38] Pompeius Lenæus,[39] Sextius Niger[40] who wrote in Greek, Julius Bassus[41] who wrote in Greek, Antonius Castor,[42] Cornelius Celsus.[43]

FOREIGN AUTHORS QUOTED.—Theophrastus,[44] Democritus,[45] Juba,[46] Orpheus,[47] Pythagoras,[48] Mago,[49] Menander[50] who wrote the "Biochresta," Nicander,[51] Homer, Hesiod,[52] Musæus,[53] Sophocles,[54] Xanthus,[55] Anaxilaüs.[56]

MEDICAL AUTHORS QUOTED. — Mnesitheus,[57] Callimachus,[58]

ovata or bifolia of Linnæus, Ivy blade. The indentations in the leaves are almost imperceptible.

33 See B. xxv. c. 28.
34 See B. xxvi. c. 70.
35 See c. 39 of this Book, *et seq.*
36 See B. xxv. c. 19.
37 See end of B. ii.
38 See end of B. xx.
39 See end of B. xiv.
40 See end of B. xii.
41 See end of B. xx.
42 See end of B. xx.
43 See end of B. vii.
44 See end of B. iii.
45 See end of B. ii.
46 See end of B. v.
47 See end of B. xx.
48 See end of B. ii.
49 See end of B. viii.
50 See end of B. xix.
51 See end of B. viii.
52 See end of B. vii.
53 See end of B. xxi.
54 See end of B. xxi.
55 See end of B. xxv.
56 See end of B. xxi.
57 See end of B. xxi.
58 See end of B. iv.

Phanias[59] the physician, Timaristus,[60] Simus,[61] Hippocrates,[62] Chrysippus,[63] Diocles,[64] Ophelion,[65] Heraclides,[66] Hicesius,[67] Dionysius,[68] Apollodorus[69] of Citium, Apollodorus[70] of Tarentum, Praxagoras,[71] Plistonicus,[72] Medius,[73] Dieuches,[74] Cleophantus,[75] Philistion,[76] Asclepiades,[77] Creteuas,[78] Petronius Diadotus,[79] Iollas,[80] Erasistratus,[81] Diagoras,[82] Andreas,[83] Mnesides,[84] Epicharmus,[85] Damion,[86] Tlepolemus,[87] Metrodorus,[88] Solo,[89] Lycus,[90] Olympias[91] of Thebes, Philinus,[92] Petrichus,[93] Micton,[94] Glaucias,[95] Xenocrates.[96]

[59] See end of B. xxi.
[60] See end of B. xxi.
[61] See end of B. xxi.
[62] See end of B. vii.
[63] See end of B. xx.
[64] See end of B. xx.
[65] See end of B. xx.
[66] See end of B. xii.
[67] See end of B. xv.
[68] See end of B. xii.
[69] See end of B. xx.
[70] See end of B. xx.
[71] See end of B. xx.
[72] See end of B. xx.
[73] See end of B. xx.
[74] See end of B. xx.
[75] See end of B. xx.
[76] See end of B. xx.
[77] See end of B. vii.
[78] See end of B. xx.
[79] See end of B. xx.
[80] See end of B. xii.
[81] See end of B. xi.
[82] See end of B. xii.
[83] See end of B. xx.
[84] See end of B. xii.
[85] See end of B. xx.
[86] See end of B. xx.
[87] See end of B. xx.
[88] See end of B. xx.
[89] See end of B. xx.
[90] See end of B. xii.
[91] See end of B. xx.
[92] See end of B. xx.
[93] See end of B. xix.
[94] See end of B. xx.
[95] See end of B. xx.
[96] See end of B. xx.

# BOOK XXVII.

## A DESCRIPTION OF PLANTS, AND OF THE REMEDIES DERIVED FROM THEM.

### CHAP. 1. (1.)—RESEARCHES OF THE ANCIENTS UPON THIS SUBJECT.

THE further I proceed in this work, the more I am impressed with admiration of the ancients; and the greater the number of plants that remain to be described, the more I am induced to venerate the zeal displayed by the men of former times in their researches, and the kindly spirit manifested by them in transmitting to us the results thereof. Indeed their bounteousness in this respect would almost seem to have surpassed the munificent disposition even of Nature herself, if our knowledge of plants had depended solely upon man's spirit of discovery: but as it is, it is evident beyond all doubt that this knowledge has emanated from the gods themselves, or, at all events, has been the result of divine inspiration, even in those cases where man has been instrumental in communicating it to us. In other words, if we must confess the truth—a marvel surpassed by nothing in our daily experience—Nature herself, that common parent of all things, has at once produced them, and has discovered to us their properties.

Wondrous indeed is it, that a Scythian[1] plant should be brought from the shores of the Palus Mæotis, and the euphorbia[2] from Mount Atlas and the regions beyond the Pillars of Hercules, localities where the operations of Nature have reached their utmost limit! That in another direction, the plant britannica[2*] should be conveyed to us from isles of the Ocean situate beyond the confines of the earth![3] That the æthiopis[4] should reach us from a climate scorched by the

[1] He alludes to the Glycyrrhiza or Scythice, our Liquorice, which is still found on the banks of the river Volga. See B. xxi. c. 54, B. xxii. c. 11, B. xxv. c. 43, and B. xxvi. cc. 15, 87.

[2] See B. xxv. c. 38.

[2*] See B. xxv. c. 6.

[3] "Extra terras." Meaning, the continental part of the earth.

[4] See c. 3 of this Book.

luminaries of heaven! And then, in addition to all this, that there should be a perpetual interchange going on between all parts of the earth, of productions so instrumental to the welfare of mankind! Results, all of them, ensured to us by the peace that reigns under the majestic sway of the Roman power, a peace which brings in presence of each other, not individuals only, belonging to lands and nations far separate, but mountains even, and heights towering above the clouds, their plants and their various productions! That this great bounteousness of the gods may know no end, is my prayer, a bounteousness which seems to have granted the Roman sway as a second luminary for the benefit of mankind.

CHAP. 2. (2.)—ACONITE, OTHERWISE CALLED THELYPHONON, CAMMARON, PARDALIANCHES, OR SCORPIO; FOUR REMEDIES.

But who, I say, can sufficiently venerate the zeal and spirit of research displayed by the ancients? It is they who have shown us that aconite is the most prompt of all poisons in its effects —so much so indeed, that female animals, if the sexual parts[5] are but touched with it, will not survive a single day. With this poison it was that M. Cæcilius[6] accused Calpurnius Bestia of killing his wives in their sleep, and this it was that gave rise to that fearful peroration of his, denouncing the murderous finger of the accused.[7] According to the fables of mythology, this plant was originally produced from the foam of the dog Cerberus, when dragged by Hercules from the Infernal[8] Regions; for which reason, it is said, it is still so remarkably abundant in the vicinity of Heraclea in Pontus, a spot where the entrance is still pointed out to the shades below.

And yet, noxious as it is, the ancients have shown us how to employ aconite for the benefit of mankind, and have taught us as the result of their experience, that, taken in mulled wine, it neutralizes the venom of the scorpion: indeed such is the nature of this deadly plant, that it kills man, unless it can find

[5] See B. xxv. c. 75.

[6] Properly "Cælius"—the same M. Cælius Rufus who is mentioned in B. vii. c. 50. See also B. xxxv. c. 46.

[7] "Hinc illa atrox peroratio ejus in digitum." Sillig is probably right in his suggestion that the word "mortiferum" is wanting at the end of the sentence. Bestia was accused of having killed his wives by the contact of aconite, applied, through the agency of the finger, to the secret parts.

[8] See B. vi. c. i.

in man something else to kill. When such is the case, as though it had discovered in the body a fit rival to contend with, that substance is the sole object of its attack; finding another poison in the viscera, to it alone it confines its onslaught; and thus, a truly marvellous thing! two poisons, each of them of a deadly nature, destroy one another within the body, and the man survives. Even more than this, the ancients have handed down to us remedies employed by the animals themselves, and have shown how that venomous creatures even effect their own cure. By the contact of aconite the scorpion is struck with torpor,[9] is quite benumbed, assumes a pallid hue, and so confesses itself vanquished. When this is the case, white hellebore is its great auxiliary: the very touch of it dispels its torpor, and the aconite is forced to yield before two foes, its own enemy [10] and the common [11] enemy of all.

Now, after this, if any one should be of opinion that man could, by any chance or possibility, make such discoveries as these, he must surely be guilty of ingratitude in thus appreciating the beneficence of the gods! In countries frequented by the panther, they rub meat with aconite, and if one of those animals should but taste it, its effects are fatal: indeed were not these means adopted, the country would soon be overrun by them. It is for this reason, too, that some persons have given to hellebore the name of "pardalianches."[12] It has been well ascertained, however, that the panther instantaneously recovers if it can find the opportunity of eating human ordure.[13] So far as these animals are concerned, who can entertain a doubt that it was chance only that first led them to this discovery; and that as often as this happens the discovery is only a mere repetition of the accident, there being neither reason nor an appreciation of experience to ensure its transmission among them?

(3.) It is chance,[14] yes, it is chance that is the Deity who has made to us these numerous revelations for our practical

[9] See B. xxv. c. 75.

[10] The hellebore. See B. xxiii. c. 75, and B. xxv. c. 21.

[11] The scorpion.

[12] "Pard-strangle."

[13] See B. viii. c. 41.

[14] He seems here, by implication, to contradict himself, and, by his explanation, to be sensible that he does so. He would appear not to have known exactly what his belief was in reference to first causes.

benefit;[15] always understanding that under this name we mean Nature, that great parent and mistress of all things: and this is evident, whether we come to the conclusion, that these wild beasts make the discovery from day to day, or that they are gifted from the first with these powers of perception. Regarded in another point of view, it really is a disgrace that all animated beings should have an exact knowledge of what is beneficial to them, with the exception of man!

The ancients, openly professing their belief that there is no evil without some admixture of good, have asserted that aconite is a remarkably useful ingredient in compositions for the eyes. It may therefore be permitted me, though I have hitherto omitted a description of the poisonous plants, to point out the characteristics of aconite, if only that it may be the more easily detected. Aconite[16] has leaves like those of cyclaminos[17] or of the cucumber, never more than four in number, slightly hairy, and rising from near the root. This root, which is of moderate size, resembles the sea-fish known as the "cammarus,"[18] a circumstance owing to which the plant has received the name of "cammaron" from some; while others, for the reason already[19] mentioned, have called it "thelyphonon."[20] The root is slightly curved, like a scorpion's tail, for which reason some persons have given it the name of "scorpio." Others, again, have preferred giving it the name of "myoctonon,"[21] from the fact that the odour of it kills mice at a considerable distance even.

This plant is found growing upon the naked rocks known as "aconæ;"[22] and hence it is, according to some authorities,

[15] "Hoc habet nomen" is omitted; for, as Sillig says, it is evidently a gloss, which has crept into the text.

[16] The ancients no doubt knew several plants under the common name of Aconitum. The one here described, is identified by Fée with the Doronicum pardalianches of Linnæus, Leopard's bane.

[17] See B. xxv. c. 67. Fée says that neither the leaves of the Doronicum, nor of any plant of the genus Arnica, bear any resemblance to those of the Cyclamen, or the cucumber. He remarks also, that the contact solely of it is not productive of poisonous effects.

[18] A kind of crab.

[19] At the beginning of this Chapter.

[20] "Female-bane," or "female-killer." See B. xx. c. 23.

[21] "Mice-killer." This assertion is incorrect.

[22] So called from ἀ, "without," and κόνις, "dust." Theophrastus says that it received its name from the town of Aconæ, in the vicinity of which it grew in great abundance.

that it is called "aconitum," there being not so much as dust even about it to conduce to its nutriment. Such is the reason given for its name by some: but according to others, it receives this appellation from the fact that it fatally exercises the same effects upon the body that the whetstone[23] does upon the edge of iron, being no sooner employed than its effects are felt.

### CHAP. 3. (4.)—ÆTHIOPIS: FOUR REMEDIES.

Æthiopis[24] is a plant with leaves resembling those of phlomos,[25] large, numerous, hairy, and springing from the root. The stem is square, rough, similar to that of arction[25*] in appearance, and with numerous axillary concavities. The seed resembles that of the fitch, being white and twofold; the roots are several in number, long, fleshy, soft, and of a viscous taste; when dry they turn black and hard, and might easily be taken for horns. In addition to Æthiopia, this plant grows upon Mount Ida in Troas, and in Messenia. The roots are gathered in autumn, and left to dry for some days in the sun, to prevent them from turning mouldy. Taken in white wine they are curative of affections of the uterus, and a decoction of them is administered for sciatica, pleurisy, and eruptions of the throat. The kind, however, which comes from Æthiopia, is by far the best, and gives instantaneous relief.

### CHAP. 4.—AGERATON: FOUR REMEDIES.

Ageraton[26] is a ferulaceous plant, a couple of palms in height, similar to origanum[27] in appearance, and bearing flowers like balls of gold. Used as a fumigation, this plant acts as a diuretic; and as a detergent upon the uterus, when used in a sitting bath more particularly. Its name has been given to it, from the circumstance that it keeps a very long time without fading.

[23] Also called *ἀκόνη*.

[24] Generally identified with the Salvia argentea of Linnæus, Silver sage, or else with the Salvia Æthiopis, Woolly sage. It must not be confounded with the plant of the same name mentioned in B. xxiv. c. 102.

[25] See B. xxv. c. 73.

[25*] See c. 16 of this Book.

[26] "Not growing old." It is identified by Fée and Desfontaines with the Achillæa ageratum of Linnæus, Sweet milfoil or Maudlin. Littré gives as its synonym, the Hypericum origanifolium.

[27] See B. xx. c. 67.

CHAP. 5.—THE ALOE; TWENTY-NINE REMEDIES.

The aloe[28] bears a resemblance to the squill, except that it is larger, and has more substantial leaves, with streaks running obliquely. The stem is tender, red in the middle, and not unlike that of the anthericus.[29] It has a single root, which runs straight downwards, like a stake driven into the ground; its smell is powerful, and it has a bitter taste. The most esteemed aloes are those imported from India, but it grows in the Asiatic provinces[30] as well. This last kind, however, is never used, except that the leaves are applied fresh to wounds; indeed, these leaves, as well as the juice, are glutinous to a marvellous degree, and it is for this property that it is grown in vessels of a conical form, in the same way as the greater aizoüm.[31] Some persons make incisions in the stem to obtain the juice, before the seed is ripe, while others, again, make them in the leaves as well. Tearlike drops are also found adhering to it, which exude spontaneously: hence it is that some recommend that the place should be paved where it is grown, to prevent this juice from being absorbed.

Some authors have stated, that there is found in Judæa, beyond Hierosolyma, a mineral[32] aloe, but that it is inferior to the other kinds, being of a darker colour and more humid than any of the rest. Aloes[33] of the finest quality should be unctuous and shining, of a red colour, brittle, compact, like the substance of liver, and easily liquefied. That which is hard and black should be rejected; the same, too, when it is mixed with sand or adulterated with gum and acacia, a fraud which may be easily detected by the taste.

This plant is of an astringent nature, binding, and slightly calorific. It is employed for numerous purposes, but principally as a purgative,[34] it being almost the only one of all the medica-

[28] The ancients probably included under this name several distinct species of the aloe. They were well acquainted, Fée says, with the Indian aloe, but probably not with that of Africa. As described by Pliny, he identifies it with the Aloe perfoliata of Linnæus: Desfontaines gives the Aloe umbellata.

[29] See B. xxi. c. 68.

[30] "Asia."

[31] See B. xxv. c. 102. The aloe is still grown in large wooden vessels, in this country, at least; but only as an ornament.

[32] He alludes to the bitumen of Judæa, much used by the Egyptians for the purposes of embalmment.

[33] He is speaking of the prepared aloes of commerce.

[34] It is still used for this purpose.

ments which produce that effect, that is at the same time a good stomachic, and does not exercise the slightest noxious influence upon the stomach. It is taken in doses of one drachma, and, in cases of derangement of the stomach, it is administered two or three times a day, in the proportion of one spoonful to two cyathi of warm or cold water, at intervals, according to the nature of the emergency. As a purgative it is mostly taken in doses of three drachmæ; and it operates still more efficaciously, if food is eaten directly afterwards. Used with astringent wine, it prevents[35] the hair from falling off, the head being rubbed with it the contrary way of the hair, in the sun. Applied to the temples and forehead with rose oil and vinegar, or used as an infusion, in a more diluted form, it allays head-ache. It is generally agreed that it is remedial for all diseases[36] of the eyes, but more particularly for prurigo and scaly eruptions of the eye-lids; as also for marks and bruises, applied in combination with honey, Pontic honey in particular.

It is employed, also, for affections of the tonsillary glands and gums, for all ulcerations of the mouth, and for spitting of blood, if not in excess—the proper dose being one drachma, taken in water or else vinegar. Used by itself, or in combination with vinegar, it arrests hæmorrhage, whether proceeding from wounds or from other causes. In addition to these properties, it is extremely efficacious for the cure of wounds, producing cicatrization very rapidly: it is sprinkled also upon ulcerations of the male organs, and is applied to condylomata and chaps of the fundament, either in common wine, raisin wine, or by itself in a dry state, according as a mollifying or restrictive treatment is required. It has the effect, also, of gently arresting hæmorrhoidal bleeding, when in excess. In cases of dysentery, it is used as an injection, and where the digestion is imperfect it is taken shortly after the evening meal. For jaundice, it is administered in doses of three oboli, in water. As a purgative for the bowels, it is taken in pills, with boiled honey or turpentine. It is good also for the removal of hangnails. When employed in ophthalmic preparations, it is first washed, that the more gravelly portions of it may subside;

[35] There is no foundation, Fée says, for this statement.

[36] It would appear that it is still employed in India for this purpose, but it is no longer used in Europe.

or else it is put over the fire in a pipkin, and stirred with a feather from time to time, that the whole of it may be equally warmed.

### CHAP. 6.—ALCEA: ONE REMEDY.

Alcea[37] is a plant with leaves, resembling those of vervain,[38] known also as "peristereon," some three or four stems covered with leaves, a flower like that of the rose, and white roots, at most six in number, a cubit in length, and running obliquely. It grows in a soil that is rich without being dry. The root is given in wine or water, for dysentery, diarrhœa, ruptures, and convulsions.

### CHAP. 7.—THE ALYPON: ONE REMEDY.

The alypon[39] has a small stem, with a soft head, and is not unlike beet in appearance. It has an acrid, viscous taste, extremely pungent and burning. Taken in hydromel, with a little salt, it acts as a purgative. The smallest dose is two drachmæ, a moderate dose, four, and the largest, six. When used as a purgative, it is taken in chicken broth.

### CHAP. 8.—ALSINE, A PLANT USED FOR THE SAME PURPOSES AS HELXINE: FIVE REMEDIES.

Alsine,[40] a plant known as "myosoton"[41] to some, grows in the woods, to which fact it is indebted for its name of "alsine."[42] It begins to make its appearance at mid-winter, and withers in the middle of summer. When it first puts forth, the leaves bear a strong resemblance to the ears of mice. We shall have

[37] Identified by Fée with the Malva alcea of Linnæus, the Vervain mallow, an emollient and, comparatively, inert plant. Littré gives as its synonym the Malope malachoïdes, Marsh mallow. Sibthorp identifies it with the Hibiscus trionum, and Anguillara with the Althæa cannabina of Linnæus. It is probably the same plant as the Alcima, mentioned several times in B. xxvi.

[38] See B. xxv. c. 59.

[39] Identified with the Globularia alypum of Linnæus, the Three-toothed leaf Globularia, or Turbith.

[40] Identified by Sprengel with the Cerastium aquaticum, and by other authorities with the Alsine media of Linnæus, the Common chickweed. Desfontaines suggests the Stellaria nemorum, the Broadleaved stitchwort, but Fée prefers the Parietaria Cretica of Linnæus, Cretan pellitory, as its synonym.

[41] "Mouse-ear."

[42] From the Greek ἄλσος, a "grove."

occasion,[43] however, to speak of another plant, which may, with much more justice, be called "myosotis." As for alsine, it would be the same thing as helxine,[44] were it not that it is smaller and not so hairy. It grows in[45] gardens, and upon walls more particularly: when rubbed, it emits a smell like that of cucumber. It is used for abscesses, inflammations, and all those purposes for which helxine is employed; its properties, however, are not so active. It is applied topically, also, to defluxions of the eyes, and to sores upon the generative organs, and ulcerations, with barley meal. The juice is used as an injection for the ears.

### CHAP. 9.—THE ANDROSACES: SIX REMEDIES.

The androsaces[46] is a white plant, bitter, without leaves, and bearing arms surmounted with follicules, containing the seed. It grows in the maritime parts of Syria, more particularly. This plant is administered for dropsy, in doses of two drachmæ, pounded or boiled, in either water, wine, or vinegar: it acts most powerfully as a diuretic. It is used also for gout, either taken internally or used as a liniment. The seed is possessed of similar properties.

### CHAP. 10.—ANDROSÆMON OR ASCYRON: SIX REMEDIES.

Androsæmon[47] or, as some persons call it, "ascyron," is not unlike hypericon, a plant of which we have spoken already:[48] the stems, however, are larger, redder, and lie more closely together. The leaves are of a white colour, and like those of rue in shape; the seed resembles that of the black poppy, and the upper branches, when bruised, emit a red juice the colour of blood: these branches have also a resinous smell.

This plant grows in vineyards, and it is usually in the middle

[43] In c. 80 of this Book.

[44] The Parietaria officinalis; see B. xxii. c. 19.

[45] He has previously stated that it grows in the woods. The fact is, M. Fraäs says, that it grows equally upon garden walls, heaps of rubbish, in plains, upon shady rocks, and upon mountains, below an elevation of 1500 feet.

[46] Generally supposed not to be a vegetable production, but a Madrepore. Fée identifies it with the Madrepora acetabulum of Linnæus.

[47] "Man's blood." Identified by Sprengel with the Hypericum montanum, and by Sibthorp and Fée with the Hypericum perforatum, of Linnæus, Perforated tutsan or St. John's wort.

[48] See B. xxvi. cc. 53, 54.

of autumn that it is taken up and hung to dry. Used as a purgative, it is bruised with the seed, and taken in the morning or just after the evening meal, in doses of two drachmæ, in hydromel, wine, or pure water, the draught amounting to one sextarius in all. It carries off bile, and is particularly good for sciatica; but in this last case, caper root must be taken with resin the day after, the dose being one drachma, to be repeated every four days: after being purged, it is the practice for the patient, if in robust health, to take wine, but if in a weak state of body, water. It is employed topically, also, for gout, burns, and wounds, as it tends to arrest the flow of blood.

CHAP. 11.—AMBROSIA, BOTRYS, OR ARTEMISIA: THREE REMEDIES.

Ambrosia is a vague name, which has fluctuated between various plants: there is one,[49] however, which has been more particularly designated by this appellation, a branchy, shrub-like plant, with a thin stem, some three palms in height; the root of it is one third shorter, and the leaves, towards the lower part of the stem, resemble those of rue. Its diminutive branches bear a seed which hangs down in clusters, and has a vinous smell: hence it is that by some persons the plant is called "botrys,"[50] while to others it is known as "artemisia." The people of Cappadocia use it for garlands. It is employed in medicine as a resolvent.

CHAP. 12.—THE ANONIS OR ONONIS: FIVE REMEDIES.

The anonis,[51] by some called "ononis" in preference, is a branchy plant, and similar to fenugreek in appearance, except that it is more shrub-like and more hairy. It has an agreeable smell, and becomes prickly after spring. It is pickled in brine for eating. Applied fresh to ulcers, it cauterizes the margins of them. For the cure of tooth-ache, the root is boiled in oxycrate: taken in drink, with honey, the root expels urinary calculi. For epilepsy, it is administered in oxymel, boiled down to one half.

CHAP. 13.—THE ANAGYROS OR ACOPON: THREE REMEDIES.

The anagyros, known to some by the name of "aco-

[49] Identified with the Ambrosia maritima of Linnæus, the Sea ambrosia.
[50] The "cluster" plant. It still figures in the Materia Medica. See B. xxv. c. 36, and c. 31 of this Book.
[51] See B. xxi. c. 58.

pon,"[52] is a shrub-like plant, with an offensive smell, and a blossom like that of the cabbage. The seed grows in small hornlike pods of considerable length, and resembles a kidney in shape; it hardens about the time of harvest. The leaves of this plant are applied to gatherings, and are attached to the person in cases of difficult parturition, care being taken to remove them the moment after delivery. In cases where the extraction of the dead fœtus is attended with difficulty, or where the after-birth or catamenia are retarded, the leaves are taken, in doses of one drachma, in raisin wine. The leaves are administered in the same manner for asthma: they are prescribed also in old wine, for injuries inflicted by the phalangium.[53] The root is employed medicinally as a resolvent and maturative: the seed, chewed, acts as an emetic.

### CHAP. 14.—THE ANONYMOS: TWO REMEDIES.

The anonymos,[54] through not having a name, has at last found one.[55] It is brought from Scythia, and has been highly extolled by Hicesius, a physician of no small repute, as also by Aristogiton. Bruised in water and applied, it is remarkably useful for wounds, and taken in drink it is good for blows upon the chest or mamillæ, as also for spitting of blood: it has been thought, too, that it might be advantageously taken in a potion for wounds. I am of opinion that the additional statement, to the effect that, burnt fresh, it acts as a solder to iron or copper, is wholly fabulous.

### CHAP. 15. (5.)—APARINE, OMPHALOCARPOS, OR PHILANTHROPOS: THREE REMEDIES.

Aparine,[56] otherwise called "omphalocarpos"[57] or "philanthropos,"[58] is a ramose, hairy, plant, with five or six leaves at regular intervals, arranged circularly around the branches.

[52] "Dispelling lassitude." Identified with the Anagyris fœtida of Linnæus, the Stinking bean trefoil. It is a purgative, and its seeds are emetic.

[53] See B. viii. c. 41, B. x. c. 95, B. xi. cc. 24, 28.

[54] It has not been identified, Pliny being the only author that has mentioned it. The Ajuga pyramidalis of Linnæus, and the Ajuga iva have been suggested.

[55] "Anonymos," or "nameless."

[56] See B. xviii. c. 44, and B. xxiv. c. 116. It is identified with the Galium Aparine of Linnæus, Ladies' bedstraw, Cleavers, goosegrass, hariff, or catchweed. Its medicinal properties are next to nothing.

[57] "Navel-fruit."

[58] "Man-loving." See B. xxiv. c. 116.

The seed is round, hard, concave, and of a sweetish taste. It grows in cornfields, gardens, and meadows, and, by the aid of its prickly points, adheres to the clothes. The seed is employed to neutralize the venom of serpents, being taken in doses of one drachma, in wine: it is useful also for the bite of the phalangium.[59] The leaves, applied topically, arrest hæmorrhage from wounds. The juice is used as an injection for the ears.

CHAP. 16.—THE ARCTION OR ARCTURUM: FIVE REMEDIES.

The arction[60] is by some called "arcturum" in preference: the leaves of it are like those of verbascum,[61] except that they are more hairy; the stem is long and soft, and the seed resembles that of cummin. It grows in rocky localities, and has a tender root, white and sweet. A decoction of it is made with wine for tooth-ache, being retained for that purpose in the mouth. The plant is taken in drink for sciatica and strangury, and is applied with wine to burns and chilblains, which are fomented also with the root and seed bruised in wine.

CHAP. 17.—THE ASPLENON OR HEMIONION: TWO REMEDIES.

Some persons call the asplenon[62] by the name of "hemionion."[63] It has numerous leaves, a third of a foot in length, and a slimy root, pierced with holes like that of fern, white, and hairy. It is destitute of stem, flower, and seed,[64] and is found growing upon rocks or sheltered damp walls. The most approved kind is that of Crete. A decoction of the leaves in vinegar, taken in drink for a period of thirty days, will

[59] See Note 53 above.

[60] Brotero and Linnæus identify it with the Arctium lappa of Linnæus, the Burdock or clot-burr: Sibthorp with the Conyza candida, the White fleabane: others, again, with the Celsia arcturus of Linnæus, and Sprengel with the Verbascum ferrugineum of Linnæus, the Ferruginous mullein; between which two last, Fée is unable to decide.

[61] See B. xxv. c. 73.

[62] So called from its supposed property of consuming the spleen. It is generally identified with the Asplenium ceterach of Linnæus, Spleenwort, or miltwaste. The Asplenium hemionitis of Linnæus, Mule's fern, and the Asplenium scolopendrium of Linnæus, Hart's tongue, have also been suggested; but Fée prefers the first-named plant.

[63] The "mule's plant." These animals were said to be very fond of it.

[64] This is incorrect: the Ceterach has a large quantity of seed, but it is concealed beneath a kind of downy substance.

consume the spleen, it is said, the leaves being applied simultaneously. The leaves give relief also in hiccup. This plant should never be given to females, being productive of sterility.

CHAP. 18.—THE ASCLEPIAS: TWO REMEDIES.

The asclepias[65] has leaves like those of ivy,[66] long branches, and numerous roots, thin, and odoriferous. The flower has a strong offensive smell, and the seed is like that of securidaca:[67] it is found growing in mountainous districts. The roots are used for the cure of griping pains in the bowels, and of stings inflicted by serpents, either taken in drink or applied topically.

CHAP. 19.—THE ASTER OR BUBONION: THREE REMEDIES.

The aster[68] is called "bubonion" by some, from the circumstance of its being a sovereign remedy for diseases of the groin. It has a diminutive stem with oblong leaves, two or three in number; and at the summit it is surmounted with small radiated heads, like stars. This plant is taken also in drink as an antidote to the venom of serpents: but if required for the cure of inguinal complaints, it is recommended that it should be gathered with the left hand, and attached to the body near the girdle. It is of great service also, worn as an amulet, for sciatica.

CHAP. 20.—ASCYRON AND ASCYROÏDES: THREE REMEDIES.

Ascyron[69] and ascyroïdes are plants similar to one another, and to hypericon[70] as well, except that the plant known as

[65] Possibly the Asclepias vincetoxicum of Linnæus, the Common white-flower swallow-wort; though Fée considers it somewhat doubtful.

[66] Those of Swallow-wort have no such resemblance.

[67] See B. xviii. c. 44.

[68] Desfontaines suggests the Inula bubonium, but Fée adopts the opinion of Jussieu and Sprengel, that it is the Aster amellus of Linnæus, the Italian starwort. It is probably the same plant as the Inguinalis, mentioned in B. xxvi. c. 59.

[69] Identified by Fée and Desfontaines with the Hypericum androsæmum of Linnæus, the Common tutsan, or Park leaves. Littré gives as the synonym the Hypericum perforatum of Linnæus, the Perforated St. John's wort; which last is also preferred by Sprengel. Fuchsius and Mathioli think that it is the Hypericum montanum of Linnæus.

[70] See B. xxvi. c. 53.

"ascyroïdes"[71] has larger branches, ferulaceous, red all over, and bearing small yellow heads. The seed, enclosed in small calyces, is diminutive, black, and resinous. The tops of the branches, when bruised, stain like blood; for which reason some persons have given it the name of "androsæmon."[72] The seed is used for the cure of sciatica, being taken in doses of two drachmæ, in one sextarius of hydromel. It relaxes the bowels, and carries off bile: it is applied also to burns.

CHAP. 21.—THE APHACA: THREE REMEDIES.

The aphaca[73] has remarkably diminutive leaves, and is but little taller than the lentil. The pods are of a larger size, and enclose some three or four seeds, of a darker colour, moister, and more diminutive than those of the lentil: it grows in cultivated fields. It is naturally more astringent than the lentil, but in other respects is applied to much the same purposes. The seed, used in a decoction, arrests fluxes of the stomach and bowels.

CHAP. 22.—ALCIBIUM: ONE REMEDY.

I have not found it stated by authors what kind of plant alcibium[74] is; but the root, I find, and the leaves, are pounded and employed, both externally and internally, for injuries inflicted by serpents. When the leaves are used, a handful of them is bruised in three cyathi of undiluted wine: the root is employed in the proportion of three drachmæ to the same quantity of wine.

CHAP. 23.—ALECTOROSLOPHOS OR CRISTA: TWO REMEDIES.

Alectoroslophos,[75] or crista,[75*] as we call it, has numerous

[71] It is considered to be identical with the Ascyron.

[72] "Man's blood." See c. 10 of this Book.

[73] Different probably from the plant of a similar name mentioned in B. xxi. cc. 52, 59. Fée identifies it with the Vetch, mentioned in B. xviii. c. 37. Littré gives as its synonym the Vicia cracca of Linnæus, the Tufted vetch, and Desfontaines the Lathyrus aphaca, the Yellow vetchling, or bindweed.

[74] Fée considers it to be the same plant as the Anchusa or Archebion, mentioned in B. xxii. c. 25. Desfontaines identifies the Alcibium with the Echium rubrum of Linnæus. Holland observes here that Pliny "hath here forgotten himself."

[75] "Cock's comb." The Rhinanthus crista galli of Linnæus, Yellow rattle, or cock's comb. [75*] "Crest" or "Comb."

leaves resembling a cock's comb, a thin stem, and a black seed enclosed in pods. Boiled with broken beans and honey, it is useful for cough and for films upon the eyes. The seed, too, is sprinkled whole into the eyes, and so far is it from injuring them, that it attracts and collects the filmy matter. When thus used, it changes colour, and from black becomes white, gradually swells, and comes out of itself.

CHAP. 24. (6.) — ALUM, ALSO CALLED SYMPHYTON PETRÆON: FOURTEEN REMEDIES.

The plant which we call "alum,"[76] and which is known to the Greeks as "symphyton[77] petræon," is similar to cunila bubula[78] in appearance, having a diminutive leaf and three or four branches springing from the root, with tops like those of thyme. It is a ligneous plant, odoriferous, of a sweet flavour, and provocative of saliva: the root of it is long and red. It grows upon rocks, to which circumstance it is indebted for its additional name of "petræon;" and is extremely useful[79] for affections of the sides and kidneys, griping pains in the bowels, diseases of the chest and lungs, spitting of blood, and eruptions of the fauces. The root is pounded and taken in drink, or else a decoction is made of it in wine; sometimes, also, it is applied externally. Chewed, it allays thirst, and is particularly refreshing to the pulmonary organs. It is employed topically for sprains and contusions, and has a soothing effect upon the intestines.

Cooked upon hot ashes, with the follicules removed, and then beaten up with nine peppercorns and taken in water, it acts astringently upon the bowels. For the cure of wounds it

[76] Identified by Desfontaines with the Symphytum officinale, or Great comfrey. Fée, however, considers it to be the Coris Monspeliensis of Linnæus, Montpellier coris. Lobel identifies it with the Prunella vulgaris of Linnæus, Common self-heal, and Cæsalpinus with the Hyssopus officinalis of Linnæus. See B. xxvi. c. 26.

[77] Fée reiterates his assertion here that this "rock" symphytum is a totally different plant from the Symphytum officinale, or Comfrey, though they appear to have been generally considered as identical by Scribonius Largus, Plinius Valerianus, Apuleius, and other writers.

[78] See B. xxvi. c. 26.

[79] This account of its medicinal properties applies properly to the Symphytum officinale, or Great comfrey, a plant which would appear to have been confounded by Pliny with the Alum, if Fée is right in his conjecture.

is remarkably efficacious, being possessed of agglutinating[80] properties to such a remarkable degree as to solder pieces of meat together with which it is boiled; to which, in fact, it is indebted for its Greek name.[81] It is used also for the cure of fractured bones.

CHAP. 25. (7.)—ALGA RUFA OR RED SEA-WEED: ONE REMEDY.

Red sea-weed[82] is useful as an application for the sting of the scorpion.

CHAP. 26.—ACTÆA: ONE REMEDY.

Actæa[83] has leaves with a powerful smell, rough knotted stems, a black seed like that of ivy, and soft berries. It grows in umbrageous, rugged, watery localities; and is used, in doses of one full acetabulum, for female complaints.

CHAP. 27.—THE AMPELOS AGRIA, OR WILD VINE: FOUR REMEDIES.

Ampelos agria, or wild vine, is the name of a plant with leaves of an ashy colour, as already[84] stated in our description of the cultivated plants, and long, tough twigs of a red hue, like that of the flower which we have mentioned,[85] when speaking of violets, under the name of "flame of Jove." It bears a seed which resembles the grains of the pomegranate. The root, boiled in three cyathi of water, with the addition of two cyathi of Coan wine, is slightly laxative to the bowels, and is consequently given for dropsy. It is curative also of uterine affections, and of spots upon the face in females. It is found a good plan for patients afflicted with sciatica to use the juice of this plant, bruised, applied topically, with the leaves.

CHAP. 28.—ABSINTHIUM OR WORMWOOD; FOUR VARIETIES: FORTY-EIGHT REMEDIES.

There are numerous kinds of absinthium; the Santonic,[86] for

[80] Hence its Latin name "consolida," and its French name "consoude." Fée says that Comfrey still figures in the French Materia Medica, and that the lower classes use it in most of the cases mentioned by Pliny; he states also, that it is destitute of energetic properties, in a medicinal point of view.

[81] Σύμφυτον, "consolidating."

[82] See B. xiii. c. 48, and B. xxvi. c. 66.

[83] The Actæa spicata of Linnæus, Herb-christopher or bane-berries, is mentioned by Desfontaines; but Fée is inclined to identify it with the Sambucus ebulus of Linnæus, the Dwarf elder, wall-wort, or dane-wort.

[84] See B. xxiii. c. 14.

[85] In B. xxi. cc. 33, 38.

[86] The Artemisia Santonica of Linnæus, Tartarian southernwood.

instance, so called from a city in Gaul, and the Pontic,[87] which comes from Pontus, where the cattle are fattened upon it—a diet which causes them to be destitute of gall.[88] The Pontic wormwood, we may remark, is of the finest quality, superior to that of Italy,[89] and much more bitter; the pith, however, of the Pontic wormwood is sweet. As to its general utility, a plant so commonly found and applied to such numerous uses, people are universally agreed; but with the Romans more particularly it has been always held in the highest esteem, from the fact of its being employed in their religious ceremonials. Thus, for instance, upon the Latin[90] Festival, it is the custom to have a race of four-horsed chariots in the Capital, and for the conqueror to be presented with a draught of wormwood; from the circumstance, no doubt, that our forefathers were of opinion that good health was the most valuable reward they could bestow upon his skill.

This plant is very strengthening to the stomach, and hence it is that wines are flavoured with it, as already[91] stated. A decoction of it in water is also taken, the following being the method employed in preparing it. Six drachmæ of the leaves are boiled, with the branches, in three sextarii of rain water, and the preparation is then left to cool in the open air a day and a night. Salt, too, should be added to it. When old, it is utterly useless. A dilution of wormwood steeped in water is also used, such being the name[92] given to this method of preparing it. This dilution is made by leaving the vessel covered up for three days, any kind of water being used. Pounded wormwood is but rarely employed, and the same with the extracted juice of the seed.[93] In cases, however, where it is extracted, the seed is subjected to pressure as soon as it begins to swell, after which it is soaked for three days in water, if used fresh, and seven, if dry. It is then boiled in a copper vessel, in the proportion of ten heminæ to forty-five sextarii of water, after which it is strained off and boiled

[87] The Artemisia Pontica of Linnæus, Little wormwood, or Roman wormwood.

[88] See B. xi. c. 75.

[89] The Artemisia absinthium of Linnæus, Common wormwood.

[90] Upon which occasion a sacrifice was offered on the Alban Mount. See further as to this Festival, in B. iii. c. 2.

[91] In B. xiv. c. 19. Wine of wormwood is still used medicinally.

[92] "Dilutum." An infusion.

[93] It contains a small quantity of essential oil.

gently to the consistency of honey, in the same way as the juice is extracted from the smaller centaury. The juice, however, of wormwood, thus extracted, is bad for the head and stomach; whereas the decoction, on the other hand, is wholesome in the highest degree, as it acts astringently upon the stomach, carries off bile, is a powerful diuretic, has a soothing effect upon the bowels, and assuages pains in the intestines. With the addition of sile,[94] Gallic nard, and a little vinegar, it dispels nausea and flatulency, and expels intestinal worms. It removes qualmishness, promotes the digestion, and, with the addition of rue, pepper, and salt, disperses crudities of the stomach.

The ancients were in the habit of giving wormwood as a purgative, the dose being six drachmæ of the seed with three of salt and one cyathus of honey, in one sextarius of sea water kept for some time. This preparation, however, is rendered more efficacious by doubling the proportion of salt; the seed, too, must be bruised with the greatest care, as there is considerable difficulty in pounding it. Some authorities have prescribed the dose above mentioned to be given in polenta,[95] with the addition of pennyroyal; while others recommend the leaves to be given to children in a dried fig, to disguise their bitterness. Taken with iris,[96] wormwood acts as a detergent upon the thoracic organs: for jaundice it is used raw, with parsley or adiantum.[97] In cases of flatulency, it is sipped every now and then, warmed in water; for liver complaints it is taken with Gallic nard, and for diseases of the spleen, with vinegar, pap,[98] or figs. Taken in vinegar it neutralizes the bad effects of fungi and of viscus:[99] in wine it is an antidote to the poison of hemlock, and to the bite of the shrew-mouse, and is curative of wounds inflicted by the sea-dragon[1] and the scorpion. It contributes also very greatly to the improvement of the sight, and is used as an external application, with raisin wine, for defluxions of the eyes, and with honey, for bruises.

[94] See B. xx. c. 18.
[95] See B. xviii. c. 14.
[96] See B. xxi. c. 19.
[97] See B. xxii. c. 30.
[98] "Puls." See B. xviii. c. 19.
[99] From a passage in Scribonius Largus, c. 191, it has been concluded that by the word "visco," he means the juice of the Ixias or Chamæleon, mentioned in B. xxii. c. 21.
[1] See B. ix. c. 43, and B. xxxii. c. 53.

The steam of a decoction of wormwood is curative of affections of the ears; and when they are attacked with running sores, a liniment of wormwood bruised with honey is applied. Three or four sprigs of wormwood, with one root of Gallic nard, taken in six cyathi of water, act as a diuretic and as an emmenagogue; indeed, if taken with honey, or employed as a pessary with wool, it has especial virtues as an emmenagogue. In combination with honey and nitre it is useful for quinzy, and an infusion of it in water is good for epinyctis. A topical application is made of it for recent wounds, provided always they have not been touched with water: it is employed also for ulcers upon the head. In combination with Cyprian wax or figs, it is highly recommended as a plaster for the iliac regions: it is curative also of prurigo, but it must never be administered in fevers. Taken in drink, it is a preventive of sea sickness; and, worn attached to the body, beneath an apron, it arrests inguinal swellings. The smell of it[2] induces sleep, a similar effect being produced by placing it under the pillow unknown to the party. Kept among clothes it preserves them from worms, and used as a liniment, with oil, or burnt as a fumigation, it has the effect of driving away gnats.

Writing ink, mixed with an infusion of wormwood, effectually protects the writings from the attacks of mice. Ashes of wormwood, mixed with rose unguent, stain the hair black.

### CHAP. 29.—ABSINTHIUM MARINUM OR SERIPHUM.

There is a sea wormwood[3] also, known as "seriphum" by some, the most esteemed being that of Taposiris in Egypt. Those initiated in the mysteries of Isis carry a branch of it in the hand. It has a narrower leaf than the preceding plant, and is not so bitter; it is injurious to the stomach, has a laxative effect upon the bowels, and expels intestinal worms. It is taken in drink with oil and salt; or else an infusion of it is taken in a pottage made of meal of three-month wheat. When employed as a decoction, a handful is used to one sextarius of water, the mixture being boiled down to one half.

[2] This, Fée observes, is not the case.

[3] The Artemisia maritima of Linnæus, Sea wormwood: see B. xxxii. c. 31.

CHAP. 30. (8.)—THE BALLOTES, MELAMPRASION, OR BLACK LEEK: THREE REMEDIES.

The Greeks give to the ballotes[4] the other name of "melamprasion," meaning "black leek."[5] It is a branchy plant, with black angular stems, covered with hairy leaves, larger and darker than those of the leek, [6]and possessed of a powerful smell. The leaves, bruised and applied with salt, are highly efficacious for bites inflicted by dogs: cooked upon hot ashes and applied in a cabbage leaf, they are curative of condylomata. Mixed with honey, this plant acts as a detergent upon sordid ulcers.

CHAP. 31.—BOTRYS, AMBROSIA, OR ARTEMISIA: ONE REMEDY.

Botrys[7] is a shrublike plant, which has small yellow branches, with the seed growing all round them, and leaves resembling[8] those of endive. It is found upon the banks of running streams, and is used for the cure of hardness of breathing. The people of Cappadocia call this plant "ambrosia," others again, "artemisia."

CHAP. 32.—THE BRABYLA: ONE REMEDY.

The brabyla[9] is possessed of astringent properties like those of the quince, but beyond this, authors give no particulars relative to it.

CHAP. 33.—BRYON MARITIMUM: FIVE REMEDIES.

Sea bryon[10] is a plant, no doubt,[11] with leaves like those of

[4] The Ballota nigra of Linnæus, the Fetid ballota, or Stinking black horehound; see B. xx. c. 89.

[5] He is in error here, as the word "melamprasion" means "black horehound." "Black leek" would be "melamprason."

[6] "Horehound," properly. The Ballota is of a stimulating nature, and contains a considerable quantity of essential oil.

[7] The Chenopodium botrys of Linnæus, Cut-leaved goose foot, or oak of Jerusalem. See B. xxv. c. 36, and c. 11 of this Book.

[8] There is no such resemblance. The name "botrys" was given to the plant from the little clusters formed by the blossoms.

[9] Identified by Fée with the Prunus domestica of Linnæus, var. β, or Damascena, the Damascene plum or damson. Desfontaines considers it to be the Prunus instititia, the Bullace plum. Holland mentions in a Note, "Bullois, skegs, or such like wild plums."

[10] The Ulva lactuca of Linnæus, Lettuce laver; see B. xiii. c. 49, B. xxiv. c. 17, and B. xxxii. c. 36.

[11] He probably says this in reference to the opinion expressed by Theo-

the lettuce, of a wrinkled, pursed appearance, and destitute of stem, the leaves arising from a single root: it grows upon rocks more particularly, and shells sunk in the sand. It has desiccative[12] and astringent qualities in a very high degree, properties which render it useful for reducing all kinds of abscesses and inflammations, those attendant upon gout in particular. It is good also for all affections which stand in need of cooling applications.

### CHAP. 34.—THE BUPLEURON: ONE REMEDY.

I find it stated that seed of bupleuron[13] is given for injuries inflicted by serpents; and that the wound is fomented with a decoction of the plant, in combination with leaves of the mulberry or of origanum.[14]

### CHAP. 35.—THE CATANANCE; ONE OBSERVATION UPON IT. THE CEMOS: ONE OBSERVATION UPON IT.

The catanance[15] is a Thessalian plant, which it would be a mere loss of time to describe, seeing that it is only used as an ingredient in philtres. In order, however, to expose the follies of the magical art, it may not be out of place to remark that this plant has been selected for the above-named purpose, from the fact that, as it withers, it gradually contracts and assumes the shape of the claws of a dead kite.[16]

For a similar reason we shall give no description of the plant called "cemos."[17]

phrastus, Hist. iv. 7, that it was a name for sea-weed in general, and not a specific plant.

[12] In reality, it is destitute of medicinal properties. Some kinds of laver are considered a dainty food.

[13] See B. xxii. c. 35.

[14] See B. xx. c. 67.

[15] Dioscorides speaks of two kinds of Catanance; one of which has been identified by Sprengel with the Ornithopus compressus of Linnæus, and the other with the Astragalus pugniformis. Fée expresses his doubts as to the correctness of these conclusions.

[16] "As if it would catch women, and hold them fast perforce."—*Holland.* It has been suggested that the Coronopus, or "crow's foot," mentioned in B. xxi. c. 59, was so called for a similar reason.

[17] Prosper Alpinus identifies it with the Plantago Cretica of Linnæus, and Sprengel with the Micropus erectus of Linnæus. Fée considers it to be the Gnaphalium leontopodium of Lamarck.

CHAP. 36.—THE CALYX: THREE REMEDIES.

Of the calyx[18] there are two kinds. One of these resembles arum, and is found growing in ploughed soils; the proper time for gathering it being before it begins to wither. It is employed for the same purposes as arum;[19] and an infusion of the root is taken as a purgative and as an emmenagogue. The stalks, boiled with the leaves and some pulse, are curative of tenesmus.

CHAP. 37.—THE CALYX, KNOWN ALSO AS ANCHUSA OR ONOCLIA: TWO REMEDIES.

The other[20] kind of calyx is known by some persons as "anchusa," and by others as "onoclia." The leaves are like those of the lettuce, but longer, and with a downy surface. The root is red, and is employed topically, in combination with fine polenta,[21] for the cure of erysipelas: taken internally with white wine, it is good for affections of the liver.

CHAP. 38.—THE CIRCÆA: THREE REMEDIES.

The circæa[22] resembles the cultivated trychnon[23] in appearance. It has a small swarthy flower, a diminutive seed, like millet, growing in small horn-shaped pods, and a root half a foot in length, generally triple or fourfold, white, odoriferous, and hot in the mouth. It is found growing upon rocks exposed to the sun. An infusion of it is prepared with wine, and administered for pains and affections of the uterus: to make it, three ounces of the pounded root should be steeped

[18] Other readings are "calsa," and "calla;" but "calyx" is supported by the text of Dioscorides, B. iv. c. 23. The first kind has been generally identified with the Arum arisarum of Linnæus, Hooded arum, or Monk's hood, and is identical probably with the Aris aros of B. xxiv. c. 94.

[19] See B. xxiv. c. 93.

[20] Probably the Anchusa tinctoria of Linnæus, Dyer's alkanet. See B. xxii. c. 23.

[21] "Flore polentæ." See B. xviii. c. 14.

[22] Sprengel identifies it with the Asclepias nigra, Black swallow-wort, but Fée considers it to be the Circæa Lutetiana of Linnæus, Parisian circæa, or enchanter's nightshade. Other authorities have suggested the Capsicum annuum of Linnæus, Indian or Guinea pepper, and the Celosia margaritacea of Linnæus, Pearly celosia, or cock's comb. M. Fraas suggests, though with some doubt, the Cynanchum Monspeliacum, the Montpellier dog's-bane.

[23] See B. xxi. c. 105.

in three sextarii of wine a day and a night. This potion is effectual also for bringing away the after-birth. The seed of this plant, taken in wine or hydromel, diminishes the milk in nursing women.

### CHAP. 39.—THE CIRSION: ONE REMEDY.

The cirsion[24] is a plant consisting of a diminutive and delicate stem, two cubits in height, of a triangular form, and covered with prickly leaves. The prickles on the leaves are downy, and the leaves themselves resemble those of buglossos[25] in shape, but are smaller, and of a whitish colour. At the summit of the plant there are small purple heads, which fall off in the shape of down. This plant or the root of it, worn as an amulet, it is said, is curative of the pains attendant upon varicose veins.

### CHAP. 40.—THE CRATÆGONON; TWO KINDS OF IT: EIGHT REMEDIES.

The cratægonon[26] is similar to an ear of corn in appearance. It is formed of numerous shoots, springing from a single root, and full of joints. It grows in umbrageous localities, and has a seed like that of millet, with a remarkably acrid taste. If a man and woman, before the evening meal, take three oboli of this seed in three cyathi of water, for forty days consecutively, before the conception of their issue, it will be sure to be of the male[27] sex, they say.

There is another cratægonon, known also as "thelygonos,"[28] and distinguished from the last mentioned plant by the mildness of the taste. Some persons assert that females, if they take the blossom of this plant in drink, will be sure to conceive before the end of forty days. These plants, used in combination with honey, are curative of black ulcers of a chronic nature; they also fill the concavities made by fistulous

[24] Identified with the Carduus parviflorus of Linnæus, the Small-flowered thistle.

[25] See B. xxv. c. 40.

[26] Identified by Fée and Desfontaines with the Polygonum persicaria of Linnæus, the Spotted persicaria, red-shanks, fleawort, or lakeweed. Littré gives the Crucianella Monspeliaca of Linnæus, Montpellier petty madder.

[27] Hence its name, signifying that it strengthens the generative powers.

[28] See B. xxvi. c. 91.

ulcers with new flesh, and restore such parts of the body as are wasted by atrophy. They act as a detergent upon purulent sores, disperse inflammatory tumours, and alleviate gout and all kind of abscesses, those of the mamillæ in particular.

Under the name of "cratægos"[29] or "cratægon," Theophrastus[30] speaks of the tree known in Italy as the "aquifolia."

### CHAP. 41.—THE CROCODILEON: TWO REMEDIES.

The crocodileon[31] resembles the black chamæleon[32] in shape: the root is long, of an uniform thickness, and possessed of a pungent smell. It is found growing in sandy soils. Taken in drink, it causes a copious discharge of coagulated blood at the nostrils, and in this way, it is said, diminishes the volume of the spleen.

### CHAP. 42.—THE CYNOSORCHIS OR ORCHIS: FOUR REMEDIES.

The cynosorchis,[33] by some called "orchis," has leaves like[34] those of the olive, soft, three in number, half a foot in length, and lying upon the ground. The root is bulbous, oblong, and divided into two portions,[35] the upper one hard, and the lower one soft. These roots are eaten boiled, like bulbs,[36] and are mostly found growing in vineyards. If males eat the upper part, they will be parents of male issue, they say, and females, if they eat the lower part, of female. In Thessaly, the men take the soft portion in goats' milk as an aphrodisiac, and the hard part as an antaphrodisiac. Of these parts, the one effectually neutralizes the action of the other.[37]

[29] See B. xxiv. c. 72. Littré remarks that Pliny is in error here, for that the Cratægos of Theophrastus is the Cratægos azarolia of Linnæus, the Parsley-leaved hawthorn, while the Aquifolia of Pliny is the Holly. As to the latter point, see B. xvi. cc. 8, 12.

[30] Hist. Plant. B. iii. c. 15.

[31] Desfontaines identifies it with the Centaurea crocodileum of Linnæus, and Littré with the Carduus pycnocephalus of Linnæus. Ruellius considers it to be the same plant as the Leucacantha of Dioscorides, which Sprengel identifies with the Cnicus Casabonæ. Fée expresses himself at a loss as to its identity.

[32] See B. xxii. c. 21.

[33] "Dog's testicle." Considered to be a synonym merely of the Orchis, mentioned in B. xxvi. c. 62.

[34] This comparison is totally incorrect.

[35] See B. xxvi. c. 62.

[36] Or onions.

[37] A tissue of groundless superstitions.

CHAP. 43.—THE CHRYSOLACHANUM; TWO VARIETIES OF IT: THREE REMEDIES. COAGULUM TERRÆ: TWO REMEDIES.

The chrysolachanum[38] grows in pine plantations, and is similar to the lettuce in appearance. It heals wounds of the sinews, if applied without delay. There is another kind[39] of chrysolachanum mentioned, with a golden flower, and a leaf like that of the cabbage: it is boiled and eaten as a laxative vegetable. This plant, worn as an amulet by a patient suffering from jaundice, provided it be always kept in sight, is a cure for that disease, it is said. I am not certain whether this is all that might be said about the chrysolachanum, but, at all events, it is all that I have found respecting it; for it is a very general fault on the part of our more recent herbalists, to confine their account of plants to the mere name, with a very meagre description of the peculiar features of the plant, —just as though, forsooth, they were universally known. Thus, they tell us, for instance, that a plant known as "coagulum[40] terræ," acts astringently upon the bowels, and that it dispels strangury, taken in water or in wine.

CHAP. 44.—THE CUCUBALUS, STRUMUS, OR STRYCHNON: SIX REMEDIES.

The leaves of the cucubalus,[41] they tell us, bruised with vinegar, are curative of the stings of serpents and of scorpions. Some persons call this plant by the name of "strumus,"[42] while others give it the Greek name of "strychnon:" its berries are black. The juice of these berries, administered in doses of one cyathus, in two cyathi of honied wine, is curative of lumbago; an infusion of them with rose oil is used for headache, and they are employed as an application for scrofulous sores.

[38] "Golden vegetable." Supposed to be identical with the Atriplex of B. xx. c. 38, our Orage.

[39] Cultivated orage, probably.

[40] "Earth rennet." This plant has not been identified. Lobelius has made a *guess* at the Serapias abortiva of Linnæus, the Helleborine. It is pretty clear that it was unknown to Pliny himself.

[41] The same, probably, as the Trychnon of B. xxi. cc. 52, 105, Solanum nigrum or Black nightshade. In the former editions the reading is "cuculus."

[42] The "strumous" or "scrofula" plant.

CHAP. 45.—THE CONFERVA: TWO REMEDIES.

The conferva[43] is peculiar to running streams, those of the Alpine regions more particularly; receiving its name from "conferrumino,"[44] to solder together. Properly speaking, it is rather a fresh-water sponge than a moss or a plant, being a dense, porous mass of filaments. I know an instance where a man, who fell to the ground while lopping a tree of considerable height, and broke nearly every bone of his body, was cured by the agency of this plant. The patient's body was covered all over with conferva, the application being continually sprinkled with water the moment it began to dry, and only removed for the purpose of changing it when the plant gave signs of losing its virtues.[45] It is hardly credible with what rapidity he recovered.

CHAP. 46. (9.)—THE COCCUS CNIDIUS, OR GRAIN OF CNIDOS: TWO REMEDIES.

The Cnidian grain[46] has just the colour of the kermes berry.[47] It is larger than a peppercorn, and has very heating properties: hence it is that when used, it is taken in crumb of bread, that it may not burn the throat in passing downwards. It is a sovereign remedy for hemlock, and arrests[48] looseness of the bowels.

CHAP. 47.—THE DIPSACOS: TWO REMEDIES.

The dipsacos[49] has leaves like those of the lettuce, with prickly tubercles on the middle of the back. The stem of it, two cubits in length, is bristling all over with prickles of a similar nature. The joints of the stem are closely covered with two leaves, which form a concave axil in which a saltish dew-like liquid collects.[50] At the summit of the stem there

[43] Possibly the Conferva rivularis, or the C. glomerata of Linnæus, the River conferva or River sponge, or the Green cluster conferva.

[44] On account of its asserted agglutinative properties. In reality it is an inert plant, and is never used in medicine.

[45] Fée considers this statement as fabulous in every respect.

[46] See B. xiii. c. 35.

[47] "Coccus." See B. xvi. c. 12.

[48] This is not the case. Sillig is of opinion that the passage is imperfect.

[49] The same plant as the Labrum Venereum of B. xxv. c. 108. It is used for carding cloth, but is no longer employed in medicine.

[50] Hence its name "Venus' bath."

are small heads covered with prickles: it grows in watery localities.

This plant is used for the cure of chaps of the fundament and of fistula; in which latter case the root is boiled down in wine to the consistency of wax, to allow of its being introduced into the fistula in the form of a salve.[51] It is employed, too, for the cure of all kinds of warts: as a liniment for which, the juice collected in the axils, as above mentioned, is also used by some.

### CHAP. 48.—THE DRYOPTERIS: TWO REMEDIES.

The dryopteris,[52] which resembles fern in appearance, is found growing upon trees; the leaves are of a somewhat sweetish[53] flavour and marked with slight indentations, and the root is hairy. This plant is possessed of caustic properties,[54] and hence the root is pounded and used as a depilatory. In using it the skin is rubbed with it till perspiration is excited, the operation being repeated a second and a third time, care being taken not to remove the perspiration.

### CHAP. 49.—THE DRYOPHONON.

The dryophonon[55] is a similar plant, with thin stems a cubit in length, and surrounded on either side with leaves about as large as the thumb and like those of the oxymyrsine[56] in appearance, only whiter and softer: the blossom is white, and similar to that of the elder. The shoots of it are eaten boiled, and the seed is used as a substitute for pepper.

### CHAP. 50.—THE ELATINE: TWO REMEDIES.

The elatine[57] has leaves like those of the helxine,[58] diminu-

[51] "Collyrii."

[52] The same plant, probably, as the Polypodion of B. xxvi. c. 37. Littré, however, identifies it with the Asplenium adiantum nigrum of Linnæus, the Black maiden-hair, or spleenwort.

[53] It is the root that is sweet, and *not* the leaves.

[54] It has no such properties.

[55] The "oak-killer." Fée thinks that it may possibly be the Convallaria uniflora of Linnæus. Desfontaines names the Cochlearia draba, and Littré the Lepidium draba of Linnæus.

[56] See B. xv. cc. 7, 37, and B. xxiii. c. 83.

[57] Desfontaines and Fée identify it with the Antirrhinum spurium of Linnæus, Bastard toad-flax, calves' snout, or snapdragon. Littré gives the Linaria Græca as its synonym.

[58] See B. xxii. c. 19.

tive, round, and hairy; its branches are small, half a foot in length, five or six in number, and covered with leaves from the root upwards. It grows in corn-fields, and has a rough flavour: hence it is found very useful for defluxions of the eyes, the leaves being beaten up and applied with polenta[59] in a linen pledget. A decoction of this plant with linseed, taken in pottage, is good for dysentery.

### CHAP. 51.—EMPETROS, BY OUR PEOPLE CALLED CALCIFRAGA: FOUR REMEDIES.

Empetros,[60] by the people of our country called "calcifraga,"[61] grows on mountains near the sea, and is generally found upon rocks: the nearer it grows to the sea the salter it is, acting as an evacuant of bile and pituitous secretions. That, on the other hand, which grows at a greater distance and more inland, is of a more bitter flavour. It carries off the aqueous humours of the body, being taken for that purpose in broth of some kind, or else hydromel. When old, it loses its strength; but used fresh, either boiled in water or pounded, it acts as a diuretic, and disperses urinary calculi. Authorities who wish full credence to be given to this asserted property, assure us that pebbles boiled with it will split asunder.

### CHAP. 52.—THE EPIPACTIS OR ELLEBORINE: TWO REMEDIES.

The epipactis,[62] called "elleborine" by some, is a diminutive plant with small leaves. Taken in drink, it is extremely useful for diseases of the liver, and as an antidote to poisons.

### CHAP. 53.—THE EPIMEDION: THREE REMEDIES.

The epimedion[63] consists of a stem of moderate size, with ten or twelve leaves like those of ivy: it never flowers, and

[59] See B. xviii. c. 14.

[60] Fée, with Sprengel, identifies it with the Salsola polychlonos of Linnæus, Branchy saltwort or glasswort; Bauhin with the Passerina polygalifolia. The Crithmum maritimum of Linnæus, Sea samphire, has been suggested by Desfontaines. Littré gives the Frankenia pulverulenta of Linnæus. Holland suggests Saxifrage.

[61] "Calculus-breaking."

[62] See B. xiii. c. 35.

[63] Sprengel suggests the Marsilea quadrifolia of Linnæus; Columna the Botrychium lunaria of Linnæus; C. Bauhin the Ornithogalum Narbonense of Linnæus, Narbonese star of Bethlehem; and Talius the Caltha palustris of Linnæus, the Marsh marigold. Fée considers its identification impossible.

has a thin, black root, with a powerful smell. It grows in humid soils. This plant also has certain astringent and cooling properties, but females must be on their guard[64] against it. The leaves, beaten up in wine, prevent the bosom from growing too large in young girls.

CHAP. 54.—THE ENNEAPHYLLON: TWO REMEDIES.

The enneaphyllon[65] has nine long leaves, and is of a caustic nature. It is employed topically, but when used it is wrapped in wool to prevent it from cauterizing further than desirable, for it blisters immediately. For lumbago and sciatica it is of the greatest utility.

CHAP. 55.—TWO VARIETIES OF FILIX OR FERN, KNOWN TO THE GREEKS AS PTERIS, OR BLACHNON, AND AS THELYPTERIS, OR NYMPHÆ PTERIS: ELEVEN REMEDIES.

Of fern there are two varieties, equally destitute of blossom and of seed.[66] The Greeks give the name of "pteris," and sometimes "blachnon," to the kind[67] in which numerous shoots take their rise from a single root, exceeding two cubits even in length, and with a not unpleasant smell:[68] this plant is thought to be the male fern.

The other kind is known to the Greeks as "thelypteris,"[69] and sometimes, "nymphæa pteris:" it has a single stem only, with comparatively few branches, is shorter, softer, and more tufted than the other, and has channelled leaves growing near the root. Swine are fattened upon the roots of either kind. The leaves of both kinds are arranged on either side in the form of wings, whence the Greek name "pteris." The roots are long, run obliquely, and are of a swarthy colour, more par-

[64] Because it was said to be a cause of sterility.

[65] Identified with the Dentaria enneaphylla of Linnæus, the Nine-leaved tooth-wort.

[66] From this remark, Fée is of opinion that he had in view more particularly the Pteris aquilina and the Blechnum spicatum of Linnæus, plants in which the seed is not easily detected.

[67] Identified by Fée with the Polypodium filix mas of Linnæus, the Male fern.

[68] Dioscorides says it *has* a somewhat unpleasant smell, and this is nearer the truth.

[69] "Female fern." Identified by Fée with the Polypodium filix fœmina of Linnæus, Female fern or Pteris aquilina.

ticularly when dried: when wanted for use, they should be dried in the sun. These plants are found growing everywhere, but in cold soils more particularly; they should be taken up, too, at the setting of the Vergiliæ.[70] The root is only used at the end of three years, neither before that period nor after. They act as an expellent of intestinal worms; for tapeworm[71] honey is taken with them, but in other cases sweet wine, for three days.

They are, both of them, extremely detrimental to the stomach, but are laxative to the bowels, carrying off first the bile and then the aqueous humours of the body. When used for tapeworm, it is the best plan to take scammony with them, in equal proportions. For rheumatic defluxions, the root is taken in doses of two oboli, in water, after a day's abstinence from food, a little honey being taken first. Neither kind must ever be given to females; for in pregnancy they are productive of abortion, and in other cases entail sterility. Powdered fern is sprinkled upon sordid ulcers, as also upon the necks of beasts of burden, when chafed. Fern-leaves kill bugs, and serpents will never harbour among them: hence it is a good plan to strew them in places where the presence of those reptiles is suspected. The very smell, too, of burnt fern will put serpents to flight. Medical men have made this distinction as to ferns; that of Macedonia, they say, is the best, and that of Cassiope the next.

### CHAP. 56.—FEMUR BUBULUM, OR OX THIGH.

The name of femur bubulum[72] is given to a plant which is good for the sinews, applied fresh, and beaten up with salt and vinegar.

### CHAP. 57.—GALEOPSIS, GALEOBDOLON, OR GALION: SIX REMEDIES.

Galeopsis,[73] or as some call it, "galeobdolon" or "galion,"

[70] See B. xviii. c. 59.

[71] Fée remarks that root of fern is an undoubted remedy for tapeworm, and that it is worthy of remark that we owe to the ancients the two most efficient anthelmintics known, fern-root, namely, and pomegranate rind.

[72] The Femur bubulum has not been identified. C. Bauhin has suggested the Leonurus cardiaca of Linnæus, Motherwort.

[73] It has been suggested that this plant is the same as the Lamium, mentioned in B. xxii. c. 16, but Fée is not of that opinion. He identifies the Galeopsis with the Lamium purpureum of Linnæus, the Purple archangel, or dead-nettle. Littré gives as its synonym the Scrofularia peregrina of Linnæus, the Foreign figwort.

is a plant with a stem and leaves like those of the nettle, only smaller; and which, when bruised, emit a powerful smell. The flower is purple, and the plant is found growing everywhere, about hedges and foot-paths. The leaves and stems, bruised in vinegar, and applied topically, are curative of indurations, carcinomata, and scrofulous sores. They disperse also inflammatory tumours and imposthumes of the parotid glands, and it is found a useful plan to foment the parts affected with a decoction of them. Applied with salt, this plant is curative of putrid ulcers and gangrenous sores.

CHAP. 58.—THE GLAUX: ONE REMEDY.

The glaux[74] was known in ancient times as the "eugalacton."[75] In the leaves it resembles the cytisus and the lentil, only that they are whiter beneath. The branches, five or six in number, are extremely thin, and, springing from the root, creep upon the ground, with small purple blossoms upon them. This plant is found in localities near the sea. It is boiled in a pottage made of similago,[76] to increase the milk: females, however, after taking it, must immediately use the bath.

CHAP. 59. (10.)—GLAUCION: THREE REMEDIES. DIAGLAUCIA: TWO REMEDIES.

Glaucion[77] grows in Syria and Parthia; it is a plant of stunted growth, and thickly covered with leaves, like those of the poppy in appearance, only smaller and of a more repulsive aspect: it has an offensive smell, and a bitter, astringent taste. The seed, which is of a saffron colour, is put into a vessel coated with potter's clay, and heated in an oven; when taken out, a juice[78] is extracted, which is known by the same name as the plant. This juice and the leaves, bruised, are used for defluxions of the eyes, which disappear in an instant, under this

[74] Fée thinks that it may possibly be the Astragalus glaux of Linnæus, or Milk vetch, as originally suggested by Clusius. Littré gives as its synonym the Sennebierra coronopus of Poireau.

[75] The "Good milk" plant.

[76] See B. xviii. cc. 19, 20.

[77] See B. xx. c. 78, where a similar plant is mentioned. Fée identifies this plant with the Glaucium hybridum, or Chelidonium of Linnæus, the Violet-coloured celandine, or horned poppy. Littré gives the Glaucium flavum of Linnæus as its synonym.

[78] This is a yellow, acrid, caustic juice; it is no longer used in medicine.

treatment: an eye-salve, too, is prepared from the juice, known as "diaglaucia," to medical men. The milk, when the secretion of it is stopped, is restored by the agency of this plant, for which purpose it is taken in water.

### CHAP. 60.—THE GLYCYSIDE, PÆONIA, OR PENTOROBOS: TWENTY REMEDIES.

The glycyside,[79] by some called "pæonia" or "pentorobos," has a stem two cubits in length, accompanied by two or three others, and of a reddish colour, with a bark like that of the laurel. The leaves are similar to those of isatis,[80] but more unctuous, rounder, and more diminutive; the seed is enclosed in capsules, some being red and some black, there being two varieties of the plant. The female plant is generally thought to be the one to the root of which some six or eight bulbs are attached, of an elongated form; those of the male plant[81] being more in number, as it throws out more roots than one, a palm in length, and of a white colour: it has also an astringent taste. The leaves of the female plant smell like myrrh,[82] and lie closer together than those of the male.

Both plants grow in the woods, and they should always be taken up at night,[83] it is said; as it would be dangerous to do so in the day-time, the woodpecker of Mars being sure to attack the eyes[84] of the person so engaged. It is stated also that the person, while taking up the root, runs great risk of being attacked with procidence of the anus: all this, however, I take to be so much fiction, most frivolously invented to puff off their supposed marvellous properties. Both plants are used[85] for various purposes: the red seed, taken in red wine, about fifteen in number, arrest menstruation; while the black seed, taken in the same proportion, in either raisin or other wine, are curative of diseases of the uterus. The root, taken in wine, allays all kinds of pains in the bowels, and acts as a purgative; it cures opisthotony also, jaundice, nephritic diseases, and affections of the bladder. Boiled in wine, it is used for diseases of

[79] The Peony; described in B. xxv. c. 10.
[80] See B. xx. c. 25, and B. xxii. c. 2.
[81] See B. xxv. c. 10.
[82] In reality it is destitute of smell.
[83] See B. xxv. c. 10.
[84] Or, as Holland says, would "be ready to job out their eyes."
[85] In reality, the peony has no medicinal virtues whatever.

the trachea and stomach, and acts astringently upon the bowels. It is eaten also by beasts of burden, but when wanted for remedial purposes, four drachmæ are sufficient.

The black seed is useful as a preventive of night-mare,[86] being taken in wine, in number above stated: it is very good, too, to eat this seed, and to apply it externally, for gnawing pains of the stomach. Suppurations are also dispersed, when recent, with the black seed, and when of long standing, with the red: both kinds are very useful, too, for wounds inflicted by serpents, and in cases where children are troubled with calculi, being employed at the crisis when strangury first makes its appearance.

### CHAP. 61.—GNAPHALIUM OR CHAMÆZELON: SIX REMEDIES.

Gnaphalium[87] is called "chamæzelon" by some: its white, soft, leaves are used as flock, and, indeed, there is no perceptible difference. This plant is administered in astringent wine, for dysentery: it arrests looseness of the bowels and the catamenia, and is used as an injection for tenesmus. It is employed topically for putrid sores.

### CHAP. 62.—THE GALLIDRAGA: ONE REMEDY.

Xenocrates gives the name of "gallidraga"[88] to a plant which resembles the leucacanthus,[89] and grows in the marshes. It is a prickly plant, with a tall, ferulaceous stem, surmounted with a head somewhat similar to an egg in appearance. When this head is growing, in summer, small worms,[90] he says, are generated, which are put away in a box for keeping, and are attached as an amulet, with bread, to the arm on the side on which tooth-ache is felt; indeed it is quite wonderful, he says, how soon the pain is removed. These worms, however, are of no use after the end of a year, or in cases where they have been allowed to touch the ground.

[86] "Suppressionibus nocturnis."

[87] Sprengel identifies it with the Santolina maritima, Sea cudwort or cotton-weed. Fée considers its identification as doubtful.

[88] Identified by Hardouin and Desfontaines with the Dipsacus pilosus of Linnæus, the Shepherd's rod, or small white teasel. Fée is doubtful on the subject.

[89] See B. xxii. c. 18.

[90] See B. xxv. c. 28.

### CHAP. 63.—HOLCUS OR ARISTIS.

Holcus[91] is a plant that grows in arid, stony, spots: it has an ear at the end of a fine stem, and looks like barley that has put forth again when cut. Attached to the head or around the arm, it extracts[92] spikes of corn adhering to the flesh; for which reason, some persons give it the name of "aristis."

### CHAP. 64.—HYOSERIS: ONE REMEDY.

Hyoseris[92*] resembles endive in appearance, but is a smaller plant, and rougher to the touch: pounded and applied to wounds, it heals them with remarkable rapidity.

### CHAP. 65.—THE HOLOSTEON: THREE REMEDIES.

The holosteon,[93] so called by the Greeks by way of antiphrasis,[94] (in the same way that they give the name of "sweet"[95] to the gall,) is a plant destitute of all hardness, of such extreme fineness as to resemble hairs in appearance, four fingers in length, and very similar to hay-grass. The leaves of it are narrow, and it has a rough flavour: it grows upon elevated spots composed of humus. Taken in wine, it is used for ruptures and convulsions. It has the property, also, of closing wounds; indeed, if applied to pieces of meat it will solder them together.

### CHAP. 66.—THE HIPPOPHÆSTON: EIGHT REMEDIES.

The hippophæston is one of those prickly plants which fullers[96] use in their coppers; it has neither stem nor flower,

[91] Identified with the Hordeum murinum of Linnæus, and the same, most probably, as the Mouse barley of B. xxii. c. 65.

[92] Whence its name, from the Greek ἕλκω, "to draw."

[92*] "Swine's endive." It is generally identified with the Centaurea nigra of Linnæus; though, as Fée says, on very insufficient grounds, as the black centaury has but little similarity to endive.

[93] The "all-bone" plant. Desfontaines identifies it with the Plantago coronopus of Linnæus, the Buckshorn plantain; but Fée prefers the Plantago holostea of Lamarck, the Grass-leaved plantain. Littré names the Holosteum umbellatum. The Plantago albicans of Linnæus has been also mentioned.

[94] Because there is no hardness in it.

[95] Τὰ γλύκεα.

[96] See B. xxiv. c. 68. In B. xvi. c. 92, Fée identifies this plant with the Calcitrapa stellata of Lamarck. He also suggests that it may possibly be the second "Hippophaes," mentioned in B. xxii. c. 14. Desfontaines identifies it with the Cnicus stellatus, the Star-thistle. Littré gives as its

but only diminutive, empty heads, numerous small leaves of a grass-green colour, and small, soft, white roots. From these roots a juice is extracted in summer, which, taken in doses of three oboli, acts as a purgative; being used for this purpose in cases of epilepsy, fits of trembling, dropsy, vertigo, hardness of breathing, and incipient paralysis.

### CHAP. 67. (11.)—THE HYPOGLOSSA: ONE REMEDY.

The hypoglossa[97] is a plant with leaves like those of the wild myrtle, of a concave form, prickly, and presenting another small leaf within, resembling a tongue in shape. A wreath made of these leaves, placed upon the head, alleviates headache.

### CHAP. 68.—HYPECOÖN.

Hypecoön[98] is a plant found growing in corn-fields, with leaves like those of rue. Its properties are similar to those of juice of poppies.

### CHAP. 69.—THE IDÆA HERBA, OR PLANT OF IDA: FOUR REMEDIES.

The Idæan[99] plant has leaves like those of the oxymyrsine;[1] to which leaves a sort of tendril adheres, that bears a flower. This plant arrests diarrhœa, the catamenia, when in excess, and all kinds of hæmorrhage. It is of an astringent and repercussive nature.

### CHAP. 70.—THE ISOPYRON OR PHASIOLON: TWO REMEDIES.

The isopyron[2] is called "phasiolon" by some, from the circumstance that the leaf of it, which resembles that of anise, assumes a spiral form like the tendrils of the phasiolus.[3] At

synonym the Centaurea spinosa, Prickly centaury; in accordance with the opinion of M. Fraäs, who admits, however, that the statement that it has neither stem nor flower, would hardly seem to indicate a species of centaury.

97 The Ruscus hypoglossum of Linnæus, the Double tongue.

98 The Hypecoüm procumbens of Liunæus, Horned cummin.

99 Fée thinks that "Idæa herba," "plant of Ida," may possibly be one of the synonyms of the Alexandrian laurel. See B. xv. c. 39. Should that identity not hold good, he prefers the Uvularia amplexifolia of Linnæus.

1 See B. xv. cc. 7, 37, and B. xxiii. c. 83.

2 Fée suggests the Corydalis claviculata of Decandolle. Littré mentions the Fumaria capreolata of Linnæus.

3 Or kidney-bean. See B. xxiv. c. 40.

the summit of the stem, it bears small heads full of a seed like that of melanthium.[4] These heads, taken with honey or hydromel, are good for cough and other affections of the chest; they are extremely useful also for liver complaints.

### CHAP. 71.—THE LATHYRIS: TWO REMEDIES.

The lathyris[5] has numerous leaves like those of the lettuce,[6] with numbers of small buds, in which the seed is contained, enclosed in envelopes like that of the caper. When these buds are dry, the seeds, about the size of a peppercorn, are taken out: they are white, sweet, and easily cleansed from the husk. Twenty of them, taken in pure water or in hydromel, are curative of dropsy, and carry off bile. Persons who require a stronger purgative, take them with the husks on. They are apt, however, to be injurious to the stomach; for which reason a plan has been adopted of taking them with fish or else chicken broth.

### CHAP. 72.—THE LEONTOPETALON OR PARDALION: TWO REMEDIES.

The leontopetalon[7] is called "pardalion" by some: it has a leaf like that of the cabbage, and a stem half a foot in height, with numerous lateral branches, and a seed at the extremities of them, enclosed in pods like those of the chick-pea. The root resembles that of rape, and is large and black: it grows in plough lands. The root, taken in wine, neutralizes the venom of all kinds of serpents; indeed, there is nothing known that is more speedily efficacious for that purpose. It is given also for sciatica.

### CHAP. 73.—THE LYCAPSOS: TWO REMEDIES.

The lycapsos[8] has longer and thicker leaves than those of the lettuce,[9] and a long, hairy stem, with numerous offshoots a

[4] Or Gith. See B. xx. c. 71.

[5] The Euphorbia lathyris of Linnæus, the Caper plant, or Caper spurge.

[6] There is no such resemblance, except that they both contain a milky juice, the properties of which are, however, very different. It is a plant of an energetic and even dangerous nature, and must never be mistaken for the real caper.

[7] Mostly thought to be the same plant as the Leontopodium of B. xxvi. c. 34. Littré, however, identifies it with the Evax pygmæus of Linnæus.

[8] Probably the Echium Italicum of Linnæus, Italian viper's tongue.

[9] There is no resemblance between the Echium and the lettuce.

cubit in length; the flower is diminutive, and of a purple colour; it grows in champaign localities. In combination with barley-meal, it is used as an application for erysipelas: the juice of it, mixed with warm water, is employed as a sudorific, in fevers.

### CHAP. 74.—THE LITHOSPERMUM, EXONYCHON, DIOSPYRON, OR HERACLEOS: TWO REMEDIES.

Among all the plants, however, there is none of a more marvellous nature than the lithospermum,[10] sometimes called "exonychon," "diospyron,"[11] or "heracleos." It is about five inches in height, with leaves twice the size of those of rue, and small ligneous branches, about the thickness of a rush. It bears close to the leaves a sort of fine beard or spike, standing by itself, on the extremity of which there are small white stones, as round as a pearl, about the size of a chick-pea, and as hard as a pebble. These stones,[12] at the part where they adhere to the stalk, have a small cavity, and contain a seed within.

This plant is found in Italy, no doubt, but that of Crete is the most esteemed. Among all the plants, there is none that I ever contemplated with greater admiration than this; so beauteous is the conformation, that it might be fancied that the hand of an artist[13] had arranged a row of lustrous pearls alternately among the leaves; so exquisite too the nicety in thus making a stone to grow upon a plant! The authorities say that this is a creeping plant, and that it lies upon the ground; but for my own part, I have only seen it when plucked, and not while growing. It is well known that these small stones, taken in doses of one drachma, in white wine, break and expel urinary calculi,[14] and are curative of strangury. Indeed, there is no plant that so instantaneously proclaims, at

[10] Identified by Fée and Desfontaines with the Lithospermum officinale of Linnæus, Gremil, gromwell, or stone-crop. Littré mentions the Lithospermum tenuiflorum of Linnæus.

[11] "Jove's wheat," or the "plant of Hercules."

[12] This description applies to the variety of Gremil, known as the Coix lacryma of Linnæus, Job's tears, originally an Indian plant; but it may have been known in Italy in Pliny's time.

[13] A poor compliment to Nature, as Fée remarks.

[14] It has in reality no medicinal properties to speak of; but its name, "stone seed," and its appearance, would, of course, ensure its reputation as an efficient cure for calculus.

the mere sight of it, the medicinal purposes for which it was originally intended; the appearance of it, too, is such, that it can be immediately recognized, without the necessity of having recourse to any botanical authority.

CHAP. 75.—LAPIDIS MUSCUS, OR STONE MOSS: ONE REMEDY.

There grows near running streams, a dry, white moss,[15] upon ordinary stones. One of these stones, with the addition of human saliva, is rubbed against another; after which the first stone is used for touching impetigo,[16] the party so doing uttering these words:—

Φεύγετε κανθαρίδες, λύκος ἄγριος αἷμα διώκει.

"Cantharides[17] begone, a wild wolf seeks your blood."[18]

CHAP. 76.—THE LIMEUM: ONE REMEDY.

Limeum[19] is the name given by the Gauls to a plant, in a preparation of which, known to them as "deer's[20] poison," they dip their arrows[21] when hunting. To three modii of salivating mixture[22] they put as much of the plant as is used for poisoning a single arrow; and a mess of it is passed down the throat, in cases where oxen are suffering from disease, due care being taken to keep them fastened to the manger till they have been purged, as they are generally rendered frantic by the dose. In case perspiration supervenes, they are drenched all over with cold water.

CHAP. 77.—THE LEUCE, MESOLEUCON, OR LEUCAS: THREE REMEDIES.

Leuce,[23] a plant resembling mercurialis,[24] has received its

[15] Some kind of lichen, probably, but what in particular it is impossible to say. [16] Ring-worm or tetter.

[17] Hardouin says that this herpetic disease is called "cantharides," because it attacks the body as the cantharis attacks wheat. See B. xviii. c. 44.

[18] It would be superfluous to look for sense in this silly formula.

[19] Anguillara and C. Bauhin identify it with the Ranunculus thora of Linnæus, and other authorities with the Doronicum pardalianches of Linnæus. Pliny is the only writer that mentions it; and if it really had any existence, it would seem quite impossible, as Fée says, to identify it with correctness. [20] "Venenum cervarium." [21] See B. xxv. c. 25.

[22] "Salivati." Holland renders this, "A mash wherewith they used to drench cattle." [23] Identified with the Lamium of B. xxii. c. 16.

[24] See B. xxv. c. 18. The resemblance, Fée says, is by no means a striking one.

name[25] from the circumstance that a white line runs through the middle of the leaf; for which reason also, some give it the name of "mesoleucon."[26] The juice of this plant is curative of fistula, and the plant itself, bruised, is good for carcinomata. It is probably the same plant as that called "leucas," so remarkably efficacious for the venom of all kinds of marine animals. Authors have not given a description of it, beyond telling us that the wild leucas has larger leaves than the other, and has properties more strongly developed: they state also that the seed of the cultivated kind is the more acrid of the two.

### CHAP. 78.—THE LEUCOGRAPHIS: FIVE REMEDIES.

I have not found a description given by any writer of the leucographis;[27] a thing I am the more surprised at, as they tell us that it is good for the cure of spitting of blood, taken in doses of three oboli with saffron; as also that it is useful for cœliac affections, applied beaten up in water, and in cases of excessive menstruation. They state also that it enters into the composition of ophthalmic preparations, and that it fills up ulcers on the more tender parts of the body with new flesh.

### CHAP. 79. (12.)—THE MEDION: THREE REMEDIES.

The medion[28] has leaves like those of the cultivated seris,[29] a stem three feet in length, and a large, round, purple flower, at its extremity. The seed is diminutive, and the root half a foot in length: it grows upon umbrageous, sheltered rocks. The root, taken in doses of two drachmæ with honey, arrests the catamenia, the electuary being used for some days. The seed, too, is administered in wine for a similar purpose.

### CHAP. 80.—THE MYOSOTA OR MYOSOTIS: THREE REMEDIES.

The myosota[30] or myosotis is a smooth plant, throwing out

[25] The "white" plant.

[26] "White in the middle."

[27] Identified by Fée with the Cerinthe of B. xxi. c. 41. Sprengel, however, considers it to be the Carduus leucographus of Linnæus.

[28] Fée identifies it with the Campanula Medium of Linnæus, our Canterbury or Coventry bells; but this flower is blue, while the colour of the Medion is purple. Littre gives the Convolvulus althæoides of Linnæus. Sibthorp has named the Campanula laciniata; and other authorities the Michauxia campanuloïdes.

[29] See B. xx. c. 32.

[30] "Mouse-ears." Fée identifies it with the Myosotis scorpioïdes of

from a single root numerous hollowed stems, of a somewhat reddish colour; and bearing at the lower extremities swarthy, narrow, oblong leaves, sharp on the back, arranged in pairs at regular distances, and springing from delicate branches attached with axils to the main stems. The flower is blue, and the root, a finger in length, is provided with numerous filaments like hairs. This plant possesses certain septic and ulcerating properties, and hence is used for the cure of fistula of the eye. The Egyptians say that if upon the morning of the twenty-eight day of their month Thoth, a day which generally falls in our month of August, a person rubs himself with the juice of this plant before speaking to any one, he will be sure to have no diseases of the eyes all that year.

### CHAP. 81.—THE MYAGROS: ONE REMEDY.

The myagros[31] is a ferulaceous plant, with leaves like those of madder: the seed is of an oily nature—indeed, an oil is extracted from it. Ulcerations of the mouth are cured by rubbing them with the juice of this plant.

### CHAP. 82.—THE NYMA: ONE REMEDY.

The plant called "nyma"[32] bears three long leaves, like those of endive: applied to scars, it restores the skin to its natural colour.

### CHAP. 83.—THE NATRIX: ONE REMEDY.

"Natrix"[33] is the name of a plant, the root of which, when taken out of the ground, has just the rank smell of the he-goat. It is used in Picenum for the purpose of keeping away from females what with a singular credulity they call by the name of "Fatui."[34] For my own part, however, I should think that

Linnæus, Scorpion-grass, or mouse-ear, which is not of a corrosive nature, as Pliny says, but emollient and soothing. Littré names the Asperugo procumbens of Linnæus, Wild bugloss, German madwort, or great goose-grass.

[31] Sprengel identifies it with the Alyssum sativum, the Garden madwort; Fée with the Camelina sativa of Crantz, the Cultivated cameline. Littré gives the Neslia paniculata as its synonym.

[32] Or "Nigina," in some editions. It is utterly unknown.

[33] Possibly a fabulous plant; though it is generally identified with the Ononis natrix of Linnæus. Poinsinet de Sivry derives its name from the Celto-Germanic words, *nat*, "night," and *ris*, "wand;" a name given to it, according to him, for its efficacy in dispelling the illusions of the night.

[34] Or "Fauni," the same as our nightmare.

persons requiring to be treated with such medicaments as these, must be labouring under a sort of mental hallucination.

### CHAP. 84.—ODONTITIS: ONE REMEDY.

Odontitis[35] is a sort of hay-grass,[36] which throws out from a single root numerous, small, jointed stems, of a triangular form and of a swarthy hue. At the joints there are small leaves, somewhat longer than those of the polygonos;[37] and in the axils formed by these leaves is the seed, similar to barley in appearance. It has a purple, diminutive flower, and is found growing in meadows.[38] A handful of the stems, boiled in astringent wine, is used for the cure of tooth-ache,[39] the decoction being retained for some time in the mouth.

### CHAP. 85.—THE OTHONNA: ONE REMEDY.

The othonna[40] is a Syrian plant, resembling rocket in appearance; its leaves are pierced with numerous holes, and its flower resembles that of saffron, for which reason some persons have given it the name of "anemone." The juice of this plant is employed in ophthalmic preparations; it is slightly pungent, of a warming nature, and astringent as it dries. It acts as a detergent upon cicatrizations, films on the eyes, and all impediments of the sight. Some say that the plant is washed and dried, and then divided into lozenges.

### CHAP. 86.—THE ONOSMA: ONE PROPERTY.

The onosma[41] has leaves some four fingers in length, lying upon the ground, and indented like those of the anchusa:[42] it has neither[43] stem, blossom, nor seed. A pregnant woman, they say, if she eats of this plant, or even walks over it, will be sure to miscarry.

[35] Probably the Euphrasia odontites of Linnæus, the Red eye-bright.

[36] "Inter feni genera."

[37] See c. 91 of this Book. There is no resemblance between them.

[38] On the contrary, it grows in arid, sterile spots.

[39] Hence its name "odontitis," "tooth-wort."

[40] Its synonym is unknown. Sprengel has identified it with the Tagetes patula of Linnæus, but that is purely an American plant!

[41] Probably one of the Borragineæ, Fée thinks, but beyond that he considers it impossible to say. Desfontaines identifies it with the Onosma echioides of Linnæus, the Hairy onosma.

[42] See B. xxii. c. 23.

[43] If it is the plant above-mentioned, this is incorrect.

CHAP. 87.—THE ONOPORDON: FIVE REMEDIES.

The onopordon,[44] it is said, has strongly carminative effects upon asses, when they eat of it. It acts as a diuretic and as an emmenagogue, arrests diarrhœa, and disperses abscesses and suppurations.

CHAP. 88.—THE OSYRIS: FOUR REMEDIES.

The osyris[45] bears small, swarthy, flexible branches, covered with dark leaves like those of flax. The seed, which grows upon the branches, is black at first, but afterwards changes its colour and turns red. Cosmetics[46] for females are prepared from these branches. A decoction of the roots, taken in drink, is curative of jaundice. The roots, cut in pieces before the seed ripens, and dried in the sun, act astringently upon the bowels: gathered after the seed has ripened, and boiled in pottage, they are curative of defluxions of the abdomen: they are taken also by themselves, bruised in rain water.

CHAP. 89.—THE OXYS: TWO REMEDIES.

The oxys[47] is a plant with three leaves; it is given for derangement of the stomach, and patients eat it who are suffering from intestinal hernia.[48]

CHAP. 90.—THE POLYANTHEMUM OR BATRACHION: THREE REMEDIES.

The polyanthemum,[49] by some persons called "batrachion,"[50] by virtue of its caustic properties has an excoriating effect upon scars, and restores the skin to its proper colour. It heals white morphew[51] also.

[44] Fée suggests that it may be identical with the Onopyxos of B. xxi. c. 56. Desfontaines, also, identifies it with the Onopordon acanthium of Linnæus, the Cotton thistle or woolly thistle.

[45] Probably the Osyris alba of Linnæus, the Poet's cassia. Anguillara and Dodonæus have mentioned the Chenopodium scoparia of Linnæus, the Summer cypress, or line-leaved goosefoot, but without any good reason, it is thought. Holland calls it "toad-flax."

[46] "Smegmata."

[47] The "sour" plant. Mostly identified with the Oxalis acetosella of Linnæus, Cuckoo's meat, three leaved sorrel, or wood-sorrel.

[48] "Enterocele."

[49] The "many-flowered" plant. Probably the Ranunculus polyanthemos of Linnæus. See B. xxv. c. 109.

[50] The "frog" plant.

[51] "Vitiligines."

CHAP. 91.—THE POLYGONOS, POLYGONATOS, TEUTHALIS, CARCINETHRON, CLEMA, OR MYRTOPETALOS, OTHERWISE KNOWN AS SANGUINARIA OR ORIOS; FOUR VARIETIES OF IT: FORTY REMEDIES.

The Greeks give the name of "polygonos"[52] to the plant known to us as "sanguinaria."[53] It is but little elevated above the ground, has leaves like those of rue, and resembles grass in appearance. The juice of it, injected into the nostrils, arrests hæmorrhage: taken with wine, it has a similar effect upon bleeding at any other part of the body, as also spitting of blood. Those who distinguish several kinds of polygonos, make this to be the male[54] plant, and say that it is so called from the large number of seeds, or else from its numerous branches. Some call it "polygonatos,"[55] from the number of its joints, others, again, "teuthalis," and others, "carcinethron," "clema," or "myrtopetalos."

There are some authorities to be found, however, who say that this is the female plant, and that the male is more diminutive, less swarthy, and more jointed, with a seed protruding beneath all the leaves. However this may be, these plants are of an astringent, cooling nature. The seed is laxative, and, taken in large doses, acts as a diuretic, and arrests defluxions; indeed, if there is no defluxion, it is of no use taking it. For burning heats of the stomach, the leaves are applied topically; and they are used, in the form of a liniment, for pains in the bladder, and for erysipelas. The juice is used as an injection for suppurations of the ears, and by itself, for pains in the eyes. It is administered, also, in fevers, tertian and quartan fevers more particularly, in doses of two cyathi, just before the paroxysms come on; as also in cases of cholera, dysentery, and derangement of the stomach.

There is a third kind, which grows on the mountains, and is known as "orios,"[56] similar to a delicate reed in appearance, and

[52] "Many-seeded." [53] "Blood plant."

[54] Identified by Fée with the Polygonum aviculare of Linnæus, the Knot-grass.

[55] "Many-knotted." Scribonius says that it received its name, "polygonos," from its being found everywhere.

[56] Or "mountain" plant. Fée considers it to be the same as the second kind above mentioned, and to correspond with the female Polygonos of Dioscorides. He identifies it with the Hippuris vulgaris of Linnæus,

having but a single stem, with numerous joints running into one another; the leaves of it are similar to those of the pitch-tree, and the root is never used. This variety, however, is not so efficacious as those already mentioned, and, indeed, is used exclusively for sciatica. A fourth kind is known as the wild[57] polygonos: it is a shrub, almost a tree in fact, with a ligneous root, a red trunk like that of the cedar, and branches resembling those of spartum,[58] a couple of palms in length, and with three or four dark-coloured, knotted joints. This kind, also, is of an astringent nature, and has a flavour like that of the quince. It is either boiled down in water to one third, or else dried and powdered for sprinkling upon ulcerations of the mouth and excoriations: it is chewed, also, for affections of the gums. It arrests the progress of corrosive ulcers and of all sores of a serpiginous nature, or which cicatrize with difficulty, and is particularly useful for ulcerations caused by snow. Herbalists employ it also for quinzy, and use it as a chaplet for head-ache; for defluxions of the eyes, they put it round the neck.

In cases of tertian fever, some persons pull it up with the left hand, and attach it as an amulet to the body; the same, too, in cases of hæmorrhage. There is no plant that is more generally kept by them in a dry state than the polygonos.

### CHAP. 92.—THE PANCRATIUM: TWELVE REMEDIES.

The pancratium is called by some the "little squill,"[59] in preference: it has leaves like those of the white lily, but longer and thicker, and a root composed of a large, red, bulb. The juice of it, taken with meal of fitches, relaxes the bowels, and acts as a detergent upon ulcers: for dropsy, and diseases of the spleen, it is administered with honey. Some persons boil it till the water becomes sweet; the water is then poured off, and the root is pounded and divided into tablets, which

Mare's tail, or female horse-tail; Littré gives the Equisetum pallidum of Bory as its synonym.

[57] Identified by Fée with the Ephedra distachya of Linnæus, the Great shrubby horsetail.

[58] See B, xix. c. 7.

[59] "Scillam pusillam." Fée considers it to be a squill, the variety with the red root of the Scilla maritima of Linnæus, the Sea-squill. Littré gives as its synonym the Pancratium maritimum of Linnæus, the Sea-daffodil.

are dried in the sun and used for ulcerations of the head, and other affections which require detergents. It is sometimes given for cough, a pinch in three fingers in wine, and, in the form of an electuary, for pains in the side or peripneumony.

It is administered, also, in wine, for sciatica, griping pains in the bowels, and retardations of the catamenia.

### CHAP. 93.—THE PEPLIS, SYCE, MECONION, OR MECON APHRODES: THREE REMEDIES.

The peplis,[60] known by the various names of "syce,"[61] "meconion," and "mecon aphrodes," is a shrub-like plant, springing from a single, diminutive, root. The leaves of it resemble those of rue, but are a little larger; the seed, which lies beneath the leaves, is round, and smaller than that of the white poppy. It is ordinarily gathered in vineyards, at harvest-time, and is dried with the seed on, receivers being placed beneath to catch it as it falls. This seed, taken in drink, purges the bowels, and carries off bile and pituitous secretions: one acetabulum, taken in three heminæ of hydromel, is a middling dose. It is sprinkled also upon meat and other articles of food, as a laxative medicine.

### CHAP. 94.—THE PERICLYMENOS: FIVE REMEDIES.

The periclymenos[62] is also a shrub-like plant, with two whitish, soft, leaves, arranged at intervals. At the extremity, among the leaves, is the seed, hard, and very difficult to pluck. It grows in ploughed fields and hedges, entwining around every object from which it can gain support. The seed is dried in the shade, pounded, and divided into lozenges. These lozenges are left to dissolve, in three cyathi of white wine, for a period of thirty days, and are given for diseases of the spleen; the volume of which is gradually diminished either by discharges of bloody urine, or else by alvine evacuation, the effects of the medicament being perceptible at the end of ten days. The leaves, boiled, act as a diuretic, and are useful for hardness of breathing. Taken in drink, in manner above-

[60] Probably the Euphorbia peplis of Linnæus; see B. xx. c. 81. It is a strong purgative.

[61] "Fig-plant," "poppy-juice," and "poppy-froth." In reference, no doubt, to its milky juice.

[62] See the Clymenus, B. xxv. c. 33.

mentioned, they facilitate delivery, and bring away the after-birth.

### CHAP. 95.—PELECINON: ONE REMEDY.

We have already[63] spoken of pelecinon as growing in corn-fields, a plant which throws out a number of shoots from thin stems, and has leaves like those of the chick-pea. The seed, which is contained in pods of a curved shape, like diminutive horns and three or four in number, is similar to gith[64] in appearance, bitter, and an excellent stomachic. It is used as an ingredient in antidotes.[65]

### CHAP. 96.—POLYGALA: ONE REMEDY.

Polygala[66] is a palm in height, with leaves like those of the lentil at the extremity of the stem. It has an astringent taste; taken in drink, it increases the milk in nursing women.

### CHAP. 97.—POTERION, PHRYNION, OR NEURAS: FOUR REMEDIES.

Poterion,[67] or, as some call it, "phrynion" or "neuras,"[68] throws out numerous branches, is shrivelled and prickly, and covered with a thick down. The leaves of it are small and round; the branches long, soft, thin, and flexible; and the blossom elongated, and of a grass-green colour. The seed is never used, but it has a pungent flavour and a powerful smell: the plant is found growing upon moist, watery, elevations. The roots are two or three in number, some two cubits in length, sinewy, white, and firm. It is dug up in autumn, and the stem yields a juice like gum, when cut. The root is said to be of wonderful efficacy as an application for the cure of wounds, more particularly of the sinews, even when severed. A decoction of it is also taken, with honey, for relaxations of the sinews, and for weakness or wounds of those parts.

[63] In B. xviii. c. 44. It was also called "securidaca."

[64] See B. xx. c. 71.

[65] We learn from Galen that it formed an ingredient in the great antidote of Mithridates.

[66] Fée thinks that it may possibly be the Polygala vulgaris of Linnæus, the Common milk-wort. Desfontaines mentions the Polygala amara of Linnæus, the Bitter milkwort of the South of Europe; and Littré gives the Polygala venulosa of Sibthorp.

[67] See B. xxv. c. 76.

[68] The "sinew" plant.

CHAP. 98.—THE PHALANGITIS, PHALANGION, OR LEUCACANTHA: FOUR REMEDIES.

The phalangitis[69] is by some called "phalangion," and by others "leucanthemum,"[70] or, as I find it written in some copies, "leucacantha."[71] Its branches are diminutive, never less than two in number, and running in contrary directions: the blossom is white, and similar to the flower of the red lily; the seed dark and broad, resembling the half of a lentil, but much thinner; and the root slender and of a grass-green colour. The leaves, blossoms, or seed of this plant are employed for the cure of wounds inflicted by scorpions, serpents, and the phalangium,[72] and for the removal of griping pains in the bowels.

CHAP. 99.—THE PHYTEUMA: ONE PROPERTY.

As for the phyteuma,[73] I think it a mere loss of time to describe it, it being only used as an ingredient in philtres.

CHAP. 100.—THE PHYLLON: ONE PROPERTY.

The Greeks give the name of "phyllon"[74] to a plant which grows among the rocks, in mountainous spots. The female plant is of a more grass-green colour than the other, with a thin stem, a diminutive root, and a round seed, like that of the poppy. This last kind ensures the conception of issue of the same sex; while the male plant, differing only in the seed, which resembles the olive at its first appearance, ensures the conception of male issue. They are both taken in wine.

[69] Generally identified with the Anthericum or Hemerocallis liliastrum of Linnæus, the Savoy anthericum or Spider's-wort. M Fräas says, however (*Synopsis*, p. 288), that that plant has not been found in Greece; and relying upon the description of Dioscorides, he prefers the Lloydia Græca, which grows commonly in Attica, the isles of Greece, and the Peloponnesus, as its synonym. It is found upon elevations of 1500 feet.

[70] "White flower."

[71] "White thorn."

[72] Hence its name. See B. viii. c. 41, B. x. c. 95, and B. xi. cc. 24, 28, 29.

[73] Most probably the Reseda phyteuma of Linnæus, the Crosswort.

[74] See B. xxii. c. 18, and B. xxvi. c. 91. Fée thinks that it is two plants, the Cnicus Casabonæ, and the Thelygonum cynocrambe of Linnæus, that are here spoken of. Littré gives the Mercurialis perennis of Linnæus, Dog's mercury, as its synonym.

CHAP. 101.—THE PHELLANDRION: TWO REMEDIES.

The phellandrion[75] grows in marshy spots, and has a leaf like that of parsley: the seed of it is taken in drink for calculi and affections of the bladder.

CHAP. 102.—THE PHALARIS: TWO REMEDIES.

The phalaris[76] has a long thin stem, like a reed, with a drooping flower at the extremity; the seed is like that of sesame.[77] This plant, too, taken with milk and honey, in wine or vinegar, breaks urinary calculi, and is curative of diseases of the bladder.

CHAP. 103.—THE POLYRRHIZON: FIVE REMEDIES.

The polyrrhizon[78] has leaves like those of myrtle, and numerous roots. These roots are pounded and administered in wine, for injuries inflicted by serpents: they are useful, also, for cattle.

CHAP. 104.—THE PROSERPINACA: FIVE REMEDIES.

The proserpinaca,[79] a common plant enough, is an excellent remedy for the sting of the scorpion. Powdered and mixed with brine and oil, in which the mæna[80] has been preserved, it is an excellent cure, they say, for quinzy.[81] It is also stated that, however fatigued a person may be, to the extent even of losing his voice, he will be sure to be refreshed, by putting this plant beneath his tongue; and that if it is eaten, a vomit will be the result, productive of good effects.

[75] Linnæus has given to the Fine-leaved water-hemlock the name of Phellandrium aquaticum, but the seeds of that plant are an active poison. It is probable that the Phellandrium, or "Male-cork-plant" of Pliny, still remains unknown.

[76] Possibly the Phalaris aquatica of Linnæus, the Water canary-grass. Littré gives as its synonym, the Phalaris nodosa of Linnæus, Knotted canary-grass. See Beckmann, Hist. Inv. Vol. I. p. 34, *Bohn's Ed.*

[77] This is an exaggeration; Dioscorides says "millet."

[78] Possibly the plant mentioned in B. xxv. c. 54; though the Aristolochia has not leaves like those of the myrtle.

[79] Supposed to be identical with the Polygonos, mentioned above in c. 91.

[80] See B. ix. c. 42, and B. xxvi. c. 11. From this passage it would appear that the mæna was preserved in a somewhat similar way to our Sardines.

[81] See B. xxvi. c. 11.

CHAP. 105.—RHACOMA: THIRTY-SIX REMEDIES.

Rhacoma[82] is imported from the regions situate beyond Pontus.[83] The root of it is similar to black costus,[84] but smaller and somewhat redder, inodorous, and of a hot, astringent flavour; when pounded, it yields a colour like that of wine,[85] but inclining to saffron. Applied topically, it reduces abscesses and inflammations, and heals wounds: used with raisin wine, it allays defluxions of the eyes; with honey, ecchymosis; and with vinegar, livid marks upon the skin. Reduced to powder, it is sprinkled upon malignant ulcers, and is given internally for spitting of blood, in doses of one drachma, in water. For dysentery and cœliac affections, if unattended with fever, it is administered in wine; but if there is fever, in water. It is pounded more easily when it has been steeped in water the night before. A decoction of it is given, in doses of two drachmæ, for ruptures, convulsions, contusions, and falls with violence.

In cases of pains in the chest, a little pepper and myrrh is added. When the stomach is deranged, it is taken in cold water; and the same in cases of chronic cough, purulent expectorations, liver complaint, affections of the spleen, sciatica, diseases of the kidneys, asthma, and hardness of breathing. Pounded and taken in doses of three oboli, in raisin wine, or used in the form of a decoction, it cures irritations of the trachea: applied with vinegar, it acts as a detergent upon lichens. It is taken in drink, also, for flatulency, cold shiverings, chilly fevers, hiccup, gripings of the bowels, herpetic ulcerations, oppressions of the head, vertigo attended with melancholy, lassitude accompanied with pain, and convulsions.

CHAP. 106.—THE RESEDA: TWO REMEDIES.

In the vicinity of Ariminum, there is a well-known plant called "reseda:"[86] it disperses abscesses and all kinds of inflammations. Those who employ it for these purposes, add

[82] The reading of this word is very doubtful. It is generally supposed to be the Rheum Rhaponticum of Linnæus, Pontic rhubarb.

[83] The shores of the Euxine.

[84] See B. xii. c. 25.

[85] "Fulvum," probably, "tawny-coloured," not white, red, or black; see B. xiv. cc. 11, 18.

[86] Possibly the Reseda alba of Linnæus.

the following words: "Reseda,[87] allay this disease! knowest thou not, knowest thou not, what chick it is that has torn up these roots? Let it have nor head nor feet!"[88] This formula is repeated thrice, the party spitting on the ground each time.

CHAP. 107.—THE STŒCHAS: THREE REMEDIES.

The stœchas[89] grows only in the islands of that name.[90] It is an odoriferous plant, with leaves like those of hyssop, and of a bitter taste. Taken in drink, it promotes menstruation, and allays pains in the chest. It forms an ingredient, also, in antidotes.

CHAP. 108.—THE SOLANUM, BY THE GREEKS CALLED STRYCHNON: TWO REMEDIAL PROPERTIES.

The solanum,[91] according to Cornelius Celsus,[92] is called "strychnon" by the Greeks; it is possessed of repercussive and refrigerative properties.

CHAP. 109.—SMYRNION: THIRTY-TWO REMEDIES. SINON: TWO REMEDIES.

Smyrnion[93] has a stem like that of parsley, but larger leaves, and growing principally about the young shoots, which are numerous. From the midst of these shoots the leaves make their appearance, unctuous, and bending towards the ground. This plant has a medicinal smell, penetrating to a certain degree, and agreeable: the colour of it is a pale yellow, and the stems bear rounded umbels like those of dill,[94] with a round, black seed, which dries at the beginning of summer. The root, also, is odoriferous, of an acrid, pungent flavour, soft and juicy, black on the outer coat and pale within. The smell of it partakes very much of the nature of that of myrrh, to

[87] "Reseda, morbos reseda." A pun upon the name of the plant, and the verb "resedo."

[88] Like the silly charm itself, "neither head nor tail."

[89] See B. xxvi. c. 27.

[90] The Stœchades. See B. iii. c. 11, and B. xxxii. c. 11.

[91] See B. xxi. c. 105, and c. 44 of this Book. The black nightshade is neither astringent nor cooling, but a narcotic poison.

[92] De Re Med. ii. 33.

[93] See B. xix. cc. 48, 62. It is generally identified with the Smyrnium perfoliatum of Linnæus, the Perfoliated alexander.

[94] "Anethi" is a preferable reading to "apii," "parsley."

which, in fact, it owes its name: it grows in localities of a stony nature, or covered with humus. Its medicinal properties are warming and resolvent.

The leaves and root are used as a diuretic and as an emmenagogue; the seed arrests diarrhœa; and the root, applied topically, disperses abscesses and suppurations, provided they are not inveterate, and reduces indurated tumours. It is useful, also, for injuries inflicted by the phalangium and by serpents, taken in wine, with the addition of cachrys,[95] polium,[96] or melissophyllum;[97] the dose, however, must be taken a little at a time only, for otherwise it acts as an emetic, a reason for which it is sometimes administered with rue. The seed or root is curative of cough, hardness of breathing, and diseases of the thoracic organs, spleen, kidneys, and bladder; the root, too, is used for ruptures and convulsions. This plant facilitates delivery, and brings away the afterbirth; it is also given, in combination with crethmos,[98] in wine, for sciatica. It acts as a sudorific and carminative, for which reason it is used to disperse flatulency of the stomach; it promotes, also, the cicatrization of wounds.

A juice is extracted from the root, which is very useful for female complaints, and for affections of the thoracic organs and viscera, possessing, as it does, certain calorific, digestive, and detergent properties. The seed, in particular, is given in drink for dropsy, external applications being made of the juice, and emollient poultices applied of the dried rind of the root. It is used, also, as a seasoning for food, boiled meat in particular, with the addition of honied wine, oil, and garum.[99]

Sinon,[1] a plant with a flavour very like that of pepper, promotes the digestion, and is highly efficacious for pains in the stomach.

### CHAP. 110.—TELEPHION: FOUR REMEDIES.

Telephion[2] resembles purslain in the stem and leaves. From

[95] See B. xxiv. c. 60.
[96] See B. xxi. c. 21.
[97] See B. xxi. c. 86.
[98] See B. xxvi. c. 60.
[99] "Fish-sauce." See B. ix. c. 30, and B. xxxi. c. 43.

[1] Possibly the same plant as the Sison of Dioscorides, identified with the Sison amomum of Linnæus, Field hone-wort, or stone-parsley.

[2] Identified by Fée with the Sedum Telephium of Linnæus, the Orpine or livelong; by Desfontaines with the Sedum anacampseros, the Ever-

the root of it there spring seven or eight small branches, covered with thick, fleshy leaves; it grows in cultivated spots, and among vines in particular. It is used as an application for freckles, being removed as soon as dry; it is employed, also, for white morphew,[3] being applied some six hours each night or day, and the treatment continued for about three months: after removing it, barley-meal should be applied. Telephion is healing, also, for wounds and fistulas.

### CHAP. 111.—THE TRICHOMANES: FIVE REMEDIES.

The trichomanes[4] is a plant that resembles the adiantum,[5] except that it is more slender and of a darker colour; the leaves of it, which are similar to those of the lentil, lie close together, on opposite sides, and have a bitter taste. A decoction of this plant, taken in white wine, with the addition of wild cummin, is curative of strangury. Bruised and applied to the head, it prevents the hair from falling off, and, where it has come off, restores it: pounded and applied with oil, it effects the cure of alopecy. The mere taste of it is provocative of sneezing.

### CHAP. 112.—THE THALICTRUM: ONE REMEDY.

The thalictrum[6] has leaves like those of coriander, only somewhat more unctuous, and a stem resembling that of the poppy.[7] It is found growing everywhere, in champaign localities more particularly. The leaves, applied with honey, heal ulcers.

### CHAP. 113.—THLASPI AND PERSICON NAPY: FOUR REMEDIES.

Of thlaspi there are two kinds; the first[8] of which has narrow leaves, about a finger in length and breadth, turned to-

green orpine; and by Littré with the Cerinthe aspera, the Prickly honeywort.

[3] "Vitiligini."

[4] The same plant as the Callitrichos of B. xxv. c. 86.

[5] See B. xxii. c. 30.

[6] Identified by Fée and Desfontaines with the Thalictrum minus of Linnæus, the Small meadow rue. Littré gives the Thalictrum flavum of Linnæus, the Common meadow rue.

[7] In its colour.

[8] Fée identifies it with the Thlaspi campestre of Linnæus, the Wild bastard-grass; Littré with the Thlaspi bursa pastoris of Linnæus, Shepherd's purse, otherwise known as Capsella bursa pastoris. Desfontaines gives as the Thlaspi of Galen, the Cochlearia draba of Linnæus.

wards the ground, and divided at the point. It has a slender stem, half a foot in length, and not wholly destitute of branches; the seed, enclosed in a crescent-shaped capsule,[9] is similar to a lentil in shape, except that it has a jagged appearance, to which, in fact, it owes its name;[10] the flower is white, and the plant is found near footpaths and in hedges. The seed, which has an acrid flavour, carries off bile and pituitous secretions, by vomit and by alvine evacuation, the proper dose being one acetabulum. It is used, also, for sciatica, in the form of an injection, this treatment being persevered in until it has induced a discharge of blood: it acts also as an emmenagogue, but is fatal to the fœtus.

The other thlaspi, known by some as "Persicon napy,"[11] has broad leaves and large roots, and is also very useful as an injection for sciatica. Both plants are very serviceable for inguinal complaints; it being recommended that the person who gathers them should mention that he is taking them for diseases of the groin, for abscesses of all kinds, and for wounds, and that he should pluck them with one hand only.

### CHAP. 114.—THE TRACHINIA: ONE PROPERTY.

What sort of plant the trachinia[12] is, the authorities do not state. I think that the assurance given by Democritus must be false: for it would be nothing less than a prodigy, for a plant, attached as an amulet, to consume the spleen in so short a time as three days.

### CHAP. 115.—THE TRAGONIS OR TRAGION: FOUR REMEDIES.

The tragonis,[13] or tragion, grows nowhere but in the maritime districts of the Isle of Crete; it resembles the juniper in

[9] "Peltarum specie." The "pelta" was a small, light shield, of various forms, but most commonly, perhaps, that of a crescent.

[10] From θλάω, "to break."

[11] "Persian mustard." The Lunaria annua of Linnæus, the Annual moon-wort, honesty, or satin-flower, has been suggested by Sprengel, but its identity is very doubtful.

[12] This plant is unknown. A rose of this name is mentioned in B. xxi. c. 10.

[13] See B. xiii. c. 36. Fée suggests that it may possibly be a variety of the Pistacia lentiscus of Linnæus, the Mastich-tree, or lentisk. Desfontaines identifies it with the Hypericon hircinum. M. Fräas (*Synopsis*, p. 182) suggests the Origanum maru.

the seed, leaf, and branches. Its milky juice, which thickens in the form of a gum, or its seed, taken in drink, expels pointed weapons from the flesh. The plant, too, is pounded fresh and applied as a liniment with wine, or, dried and powdered, with honey. It increases the milk in nursing women, and is a sovereign remedy for diseases of the mamillæ.

### CHAP. 116.—THE TRAGOS OR SCORPION: FOUR REMEDIES.

There is another plant also, called "tragos,"[14] or "scorpion" by some, half a foot in height, branchy, destitute of leaves, and bearing diminutive red clusters, with a seed like that of wheat, but pointed at the extremity: this too grows in maritime localities. Ten or twelve tops of the branches, bruised and taken in wine, are remedial in cases of cœliac affections, dysentery, spitting of blood, and excessive menstruation.

### CHAP. 117.—THE TRAGOPOGON OR COME.

There is the tragopogon,[15] also, by some called "come;" a plant with a small stem, leaves like those of saffron, an elongated, sweet, root, and a large, swarthy calyx at the extremity of the stem. It grows in rugged soils, and is never used.

### CHAP. 118.—THE AGES OF PLANTS.

Such, then, is all that I have hitherto been enabled to learn or discover, worthy of mention, relative to plants. At the close of this subject, it seems to me that it will not be out of place to remind the reader, that the properties of plants vary according to their age. It is elaterium, as already stated,[16] that preserves its properties the longest of all. The black chamæleon[16*] retains its virtues forty years, centaury not more than twelve, peucedanum[17] and aristolochia[18] six, and the wild vine one year—that is to say, if they are kept in the shade. I would remark, also, that beyond those animals which breed within the plants, there are none that attack the roots

[14] See B. xiii. c. 37. M. Fräas (*Synopsis*, p. 257) identifies it with the Ephedra distachya of Linnæus, the Great shrubby horsetail.

[15] "Goat's-beard. Probably the Tragopogon crocifolium of Linnæus, the Saffron-leaved goat's beard. Though its properties are not inert, it is never used in medicine.

[16] In B. xx. c. 3.

[16*] See c. 41 of this Book.

[17] See B. xxv. c. 70.

[18] See B. xxv. c. 54.

of any of those which have been mentioned by me; with the exception, indeed, of the sphondyle,[19] a kind of creeping insect,[20] which infests them all.

### CHAP. 119.—HOW THE GREATEST EFFICACY IN PLANTS MAY BE ENSURED.

It is also an undoubted truth, that the virtues and properties of all roots are more feebly developed, when the fruit has been allowed to ripen; and that it is the same with the seed, when incisions have been previously made in the root, for the extraction of the juice. The efficacy, too, of all plants is impaired by making habitual use of them; and these substances, if employed daily, lose equally their good or bad properties, when required to be effectual. All plants, too, have more powerful properties, when grown in soils that are cold and exposed to the north-eastern blasts, or in dry localities.

### CHAP. 120.—MALADIES PECULIAR TO VARIOUS NATIONS.

There are certain differences, also, by no means inconsiderable, in the predispositions of the various nations of the earth. I have been informed, for instance, that the people of Egypt, Arabia, Syria, and Cilicia, are subject to tapeworm and mawworm, while those of Thracia and Phrygia, on the other hand, are totally exempt from them. This, however, is less surprising than the fact that, although Attica and Bœotia are adjoining territories, the Thebans are troubled with these inflictions, while among the people of Athens they are unknown.

Considerations of this description lead me now to turn my attention to the nature of the animated beings themselves, and the medicinal properties which are inborn in them, the most assured remedies, perhaps, for all diseases.

For Nature, in fact, that parent of all things, has produced no animated being for the purpose solely of eating; she has willed that it should be born to satisfy the wants of others, and in its very vitals has implanted medicaments conducive to health. While she has implanted them in mute[21] and inanimate objects even, she has equally willed that these, the most in-

[19] A kind of fœtid beetle, Hardouin says. Probably an Aphis.
[20] "Serpentis."
[21] See B. xxii. c. 3.

valuable aids of life, should be also derived from the life of another—a subject for contemplation, marvellous in the highest degree![21]

SUMMARY.—Remedies, narratives, and observations, six hundred and two.

ROMAN AUTHORS QUOTED. — Caius Valgius,[22] Pompeius Lenæus,[23] Sextius Niger[24] who wrote in Greek, Julius Bassus[25] who wrote in Greek, Antonius Castor,[26] Cornelius Celsus.[27]

FOREIGN AUTHORS QUOTED. — Theophrastus,[28] Apollodorus,[29] Democritus,[30] Aristogiton,[31] Orpheus,[32] Pythagoras,[33] Mago,[34] Menander[35] who wrote the "Biochresta," Nicander.[36]

MEDICAL AUTHORS QUOTED.—Mnesitheus,[37] Timaristus,[38] Simus,[39] Hippocrates,[40] Chrysippus,[41] Diocles,[42] Ophelion,[43] Heraclides,[44] Hicesius,[45] Dionysius,[46] Apollodorus[47] of Citium, Apol-

[21] It is with regret that at the close of this Book, we take leave of the valuable Annotations of M. Fée, a series of illustrations which reflect the highest credit on his learning, his industry, and his critical acumen. Were the ancient authors in general subjected to the same minute examination and thorough enquiry which he has expended upon the Sixteen Botanical Books of Pliny, their value would be greatly enhanced, equally to the critical scholar, and to the general reader who makes his acquaintance with them through the medium of a translation. To say, that, in reference to their respective labours upon Pliny, M. Fée deserves our thanks almost equally with the learned Sillig—now, alas! no more—is to say much indeed in his praise, and to bestow upon him a commendation to which he is eminently entitled.

[22] See end of B. xx.
[23] See end of B. xiv.
[24] See end of B. xii.
[25] See end of B. xx.
[26] See end of B. xx.
[27] See end of B. vii.
[28] See end of B. iii.
[29] See end of B. xi.
[30] See end of B. ii.
[31] Beyond being mentioned here, and in c. 14 of this Book, nothing is known of this writer.
[32] See end of B. xx.
[33] See end of B. ii.
[34] See end of B. viii.
[35] See end of B. xix.
[36] See end of B. viii.
[37] See end of B. xix.
[38] See end of B. xxi.
[39] See end of B. xxi.
[40] See end of B. vii.
[41] See end of B. xx.
[42] See end of B. xx.
[43] See end of B. xv.
[44] See end of B. xii.
[45] See end of B. xv.
[46] See end of B. xii.
[47] See end of B. xx.

lodorus[48] of Tarentum, Praxagoras,[49] Plistonicus,[50] Medius,[51] Dieuches,[52] Cleophantus,[53] Philistion,[54] Asclepiades,[55] Crateuas,[56] Petronius Diodotus,[57] Iollas,[58] Erasistratus,[59] Diagoras,[60] Andreas,[61] Mnesides,[62] Epicharmus,[63] Damion,[64] Tlepolemus,[65] Metrodorus,[66] Solo,[67] Lycus,[68] Olympias[69] of Thebes, Philinus,[70] Petrichus,[71] Micton,[72] Glaucias,[73] Xenocrates.[74]

*** Before quitting the Botanical Books of Pliny, it is a duty both to our author and to the reader, to call attention to the illustrations of a few passages in this work, which will be found in the *Textrinum Antiquorum*, by Dr. James Yates, F.R.S., a book characterized by learning, equally profound and extensive, and the most indefatigable research: it being but recently, we are sorry to say, that we have been made acquainted with its valuable contents.

The following are selected as among the most useful and interesting results of his enquiries.

B. vi. c. 20 [V. ii. p. 36]. Dr. Yates is of opinion that Pliny has here mistranslated a passage of Aristotle, Hist. Anim. v. 19, and that he has mistaken the word *βομβύκια*, "cocoons," for webs, similar to those of the spider, attached to the leaves of trees. Not understanding the original, he would seem to have given a distorted account of the simple operation of winding the threads from off the cocoons of the silkworm upon bobbins, by the hands of females; the threads upon which bobbins would be afterwards unwound for the manufacture of silken fabrics. See Notes 8 and 9 on the passage in question; also B. xi. c. 26.

B. viii. c. 74 [V. ii. p. 336]. For the word "Sororiculata," Dr. Yates proposes to read "Soriculata," and he suggests that the cloth thus called may have been a velvet or plush, which received its name from its resemblance to the coat of the field-mouse, "sorex," the diminutive of which would be "soricula."

B. xix. c. 2 [V. iv. p. 133] and c. 6 [p. 138]. Dr. Yates expresses it as his opinion that the words "Carbasus" and "Carbasa" are derived from the oriental word *Carpas*, signifying "cotton," and thinks that Pliny, in B. xix. c. 2, may have used the word by Catachresis, as meaning linen, in the same manner as the Latin poets repeatedly use the word "carbasa," as signifying various kinds of woven textures. If this view be correct, the word "Carbasina" in B. xix. c. 6, will probably mean "awnings of

48 See end of B. xx. 49 See end of B. xx. 50 See end of B. xx.
51 See end of B. xx. 52 See end of B. xx. 53 See end of B. xx.
54 See end of B. xx. 55 See end of B. vii. 56 See end of B. xx.
57 See end of B. xx. 58 See end of B. xii. 59 See end of B. xi.
60 See end of B. xii. 61 See end of B. xx. 62 See end of B. xii.
63 See end of B. xx. 64 See end of B. xx. 65 See end of B. xx.
66 See end of B. xx. 67 See end of B. xx. 68 See end of B. xii.
69 See end of B. xx. 70 See end of B. xx. 71 See end of B. xxi.
72 See end of B. xx. 73 See end of B. xx. 74 See end of B. xx.

woven material" generally, and not of fine linen, or cambric, as suggested in Note *55*.

B. xix. c. 2 [V. iv. p. 134]. The genuineness of the passage which makes mention of the "Gossypium," is questioned by Dr. Yates, who thinks it possible that it is an interpolation: such, however, if we may judge from the result of Sillig's researches, does not appear to have been the case. If, on the other hand, the passage is genuine, Dr. Yates is of opinion that the statement is incorrect, and that cotton was *not* grown in Egypt. It seems just possible, however, that Pliny may have had in view the trees mentioned by him in B. xiv. c. 28.

B. xix. c. 4 [V. iv. p. 137, also p. 134, Note 37]. Dr. Yates has adduced a number of convincing arguments to prove that the "Byssus" of the ancients cannot have been cotton, but that in all probability it was a texture of fine flax. The passages of Pausanias, (B. v. c. 25, and B. vi. c. 26) in which "Byssus" is mentioned, would certainly seem to apply to flax, a product which is still cultivated near the mouth of the river Peneus, in ancient Elis. There is no doubt, however, that Philostratus, though perhaps erroneously, has used the word "Byssus" as meaning cotton.

# BOOK XXVIII.

## REMEDIES DERIVED FROM LIVING CREATURES.

### CHAP. 1. (1.)—INTRODUCTION.

We should have now concluded our description of the various things[1] that are produced between the heavens and the earth, and it would have only remained for us to speak of the substances that are dug out of the ground itself; did not our exposition of the remedies derived from plants and shrubs necessarily lead us into a digression upon the medicinal properties which have been discovered, to a still greater extent, in those living creatures themselves which are thus indebted [to other objects] for the cure of their respective maladies. For ought we, after describing the plants, the forms of the various flowers, and so many objects rare and difficult to be found—ought we to pass in silence the resources which exist in man himself for the benefit of man, and the other remedies to be derived from the creatures that live among us—and this more particularly, seeing that life itself is nothing short of a punishment, unless it is exempt from pains and maladies? Assuredly not; and even though I may incur the risk of being tedious, I shall exert all my energies on the subject, it being my fixed determination to pay less regard to what may be amusing, than to what may prove practically useful to mankind.

Nay, even more than this, my researches will extend to the usages of foreign countries, and to the customs of barbarous nations, subjects upon which I shall have to appeal to the good faith of other authors; though at the same time I have made it my object to select no[2] facts but such as are established

[1] The trees and plants.

[2] On the contrary, this and the four following Books are full of the most extravagant assertions, which bear ample testimony to his credulity, notwithstanding the author's repeated declarations that he does not believe in Magic. As Ajasson says, he evidently does not know what he ought to have inserted in his work, and what to reject as utterly unworthy of belief. His faults, however, were not so much his own as those of his age. Want of space, equally with want of inclination, compels us to forego the task of entering into an examination of the system of Animal Therapeutics upon which so much labour has been wasted by our author.

by pretty nearly uniform testimony, and to pay more attention to scrupulous exactness than to copiousness of diction.

It is highly necessary, however, to advertise the reader, that whereas I have already described the natures of the various animals, and the discoveries[2] due to them respectively—for, in fact, they have been no less serviceable in former times in discovering remedies, than they are at the present day in providing us with them—it is my present intention to confine myself to the remedial properties which are found in the animal world, a subject which has not been altogether lost sight of in the former portion of this work. These additional details therefore, though of a different nature, must still be read in connexion with those which precede.

### CHAP. 2.—REMEDIES DERIVED FROM MAN.

We will begin then with man, and our first enquires will be into the resources which he provides for himself—a subject replete with boundless difficulties at the very outset.[3]

Epileptic patients are in the habit of drinking the blood even of gladiators, draughts teeming with life,[4] as it were; a thing that, when we see it done by the wild beasts even, upon the same arena, inspires us with horror at the spectacle! And yet these persons, forsooth, consider it a most effectual cure for their disease, to quaff the warm, breathing, blood from man himself, and, as they apply their mouth to the wound, to draw forth his very life; and this, though it is regarded as an act of impiety to apply the human lips to the wound even of a wild beast! Others there are, again, who make the marrow[5] of the leg-bones, and the brains of infants, the objects of their research!

Among the Greek writers, too, there are not a few who have enlarged upon the distinctive flavours of each one of the viscera and members of the human body, pursuing their researches to the very parings of the nails! as though, forsooth, it could

[2] See B. viii. c. 97, *et seq.*, and B. xxv. c. 89, *et seq.*

[3] See B. xxviii. c. 3.

[4] This practice is mentioned with reprobation by Celsus and Tertullian. It was continued, however, in some degree through the middle ages, and Louis XV. was accused by his people of taking baths of infants' blood to repair his premature decrepitude.

[5] In recent times, Guettard, a French practitioner, recommended human marrow as an emollient liniment.

possibly be accounted the pursuit of health for man to make himself a wild beast, and so deserve to contract disease from the very remedies he adopts for avoiding it. Most righteously, by Hercules! if such attempts are all in vain, is he disappointed of his cure! To examine human entrails is deemed an act of impiety;[6] what then must it be to devour them?

Say, Osthanes,[7] who was it that first devised these practices; for it is thee that I accuse, thou uprooter of all human laws, thou inventor of these monstrosities; devised, no doubt, with the view that mankind might not forget thy name! Who was it that first thought of devouring each member of the human body? By what conjectural motives was he induced? What can possibly have been the origin of such a system of medicine as this? Who was it that thus made the very poisons less baneful than the antidotes prescribed for them? Granted that barbarous and outlandish tribes first devised such practices, must the men of Greece, too, adopt these as arts of their own?

We read, for instance, in the memoirs of Democritus, still extant, that for some diseases, the skull of a malefactor is most efficacious, while for the treatment of others, that of one who has been a friend or guest is required. Apollonius, again, informs us in his writings, that the most effectual remedy for tooth-ache is to scarify the gums with the tooth of a man who has died a violent death; and, according to Miletus, human gall is a cure for cataract.[8] For epilepsy, Artemon has prescribed water drawn from a spring in the night, and drunk from the skull of a man who has been slain, and whose body remains unburnt. From the skull, too, of a man who had been hanged, Antæus made pills that were to be an antidote to the bite of a mad dog. Even more than this, man has resorted to similar remedies for the cure of four-footed beasts even—for tympanitis in oxen, for instance, the horns have been perforated, and human bones inserted; and when swine have been found to be diseased,

[6] Hence, as Ajasson remarks, the ignorance of anatomy displayed by the ancients.

[7] For further particulars as to Osthanes, see B. xxix. c. 80, and B. xxx. cc. 5 and 6; also cc. 19 and 77 of the present Book. The reading, however, is very doubtful.

[8] "Oculorum suffusiones." As Ajasson says, the remedy here mentioned reminds us of the more harmless one used by Tobias for the cure of the blindness of his father Tobit.

fine wheat has been given them which has lain for a night in the spot where a human being has been slain or burnt!

Far from us, far too from our writings, be such prescriptions[9] as these! It will be for us to describe remedies only, and not abominations;[10] cases, for instance, in which the milk of a nursing woman may have a curative effect, cases where the human spittle may be useful, or the contact[11] of the human body, and other instances of a similar nature. We do not look upon life as so essentially desirable that it must be prolonged at any cost, be it what it may—and you, who are of that opinion, be assured, whoever you may be, that you will die none the less, even though you shall have lived in the midst of obscenities or abominations!

Let each then reckon this as one great solace to his mind, that of all the blessings which Nature has bestowed on man, there is none greater than the death[12] which comes at a seasonable hour; and that the very best feature in connexion with it is, that every person has it in his own power to procure it for himself.[13]

### CHAP. 3. (2.)—WHETHER WORDS ARE POSSESSED OF ANY HEALING EFFICACY.

In reference to the remedies derived from man, there arises first of all one question, of the greatest importance and always attended with the same uncertainty, whether words, charms, and incantations, are of any efficacy or not?[14] For if such is the case, it will be only proper to ascribe this efficacy to man himself;[15] though the wisest of our fellow-men, I should remark, taken individually, refuse to place the slightest faith in these opinions. And yet, in our every-day life, we practically show, each passing hour, that we do entertain this belief,

[9] He gives a great many, however, which are equally abominable.

[10] "Piacula."

[11] We may here discover the first rudiments of the doctrine of Animal Magnetism.

[12] In accordance with the republican doctrines of Cato of Utica, Brutus, Cassius, and Portia.

[13] Holland remarks, "Looke for no better divinitie in Plinie, a meere Pagan, Epicurean, and professed Atheist." See B. vii. cc. 53, 54.

[14] Whether or not, they cannot, as Ajasson remarks, be regarded as remedies *derived from* the human body, being no part of the human body.

[15] "Homini acceptum fieri oportere conveniat." This passage is probably corrupt.

though at the moment we are not sensible of it. Thus, for instance, it is a general belief that without a certain form of prayer[16] it would be useless to immolate a victim, and that, with such an informality, the gods would be consulted to little purpose. And then besides, there are different forms of address to the deities, one form for entreating,[17] another form for averting their ire, and another for commendation.

We see too, how that our supreme magistrates use certain formulæ for their prayers: that not a single word may be omitted or pronounced out of its place, it is the duty of one person to precede the dignitary by reading the formula before him from a written ritual, of another, to keep watch upon every word, and of a third to see that[18] silence is not ominously broken; while a musician, in the meantime, is performing on the flute to prevent any other words being heard.[19] Indeed, there are memorable instances recorded in our Annals, of cases where either the sacrifice has been interrupted, and so blemished, by imprecations, or a mistake has been made in the utterance of the prayer; the result being that the lobe of the liver or the heart has disappeared in a moment, or has been doubled,[20] while the victim stood before the altar. There is still in existence a most remarkable testimony,[21] in the formula which the Decii, father and son, pronounced on the occasions when they devoted themselves.[22] There is also preserved the prayer uttered by the Vestal Tuccia,[23] when, upon being accused of incest, she carried water in a sieve—an event which took place in the year of the City 609. Our own age even has seen a man and a woman buried alive in the Ox Market,[24] Greeks by birth, or else natives of some other[25] country with which we

[16] Beginning with an address to Janus and Vesta, imploring their intercession with the other divinities, and concluding with an appeal to Janus.

[17] "Impetritis."

[18] "Qui favere linguis jubeat." "Favete linguis" were the words used in enjoining strict silence.

[19] By him who is offering up the prayer.

[20] A trick adroitly performed by the priests, no doubt.

[21] Given by Livy, in Books viii. and x.

[22] To death, in battle, for the good of their country.

[23] Preserved by Valerius Maximus, B. viii. c. 1. Tertullian and Saint Augustin doubt the authenticity of the story. She is said to have carried water in a sieve from the river Tiber to the temple of Vesta.

[24] "Forum Boarium;" in the Eighth Region of the City.

[25] Of Gaul, as Plutarch informs us, who mentions also the Greek victims.

were at war at the time. The prayer used upon the occasion of this ceremonial, and which is usually pronounced first by the Master of the College of the Quindecimviri,[26] if read by a person, must assuredly force him to admit the potency of formulæ; when it is recollected that it has been proved to be effectual by the experience of eight hundred and thirty years.

At the present day, too, it is a general belief, that our Vestal virgins have the power, by uttering a certain prayer, to arrest the flight of runaway slaves, and to rivet them to the spot, provided they have not gone beyond the precincts of the City. If then these opinions be once received as truth, and if it be admitted that the gods do listen to certain prayers, or are influenced by set forms of words, we are bound to conclude in the affirmative upon the whole question. Our ancestors, no doubt, always entertained such a belief, and have even assured us, a thing by far the most difficult of all, that it is possible by such means to bring down lightning from heaven, as already[27] mentioned on a more appropriate occasion.

### CHAP. 4.—THAT PRODIGIES AND PORTENTS MAY BE CONFIRMED, OR MADE OF NO EFFECT.

L. Piso informs us, in the first Book of his Annals, that King Tullus Hostilius,[28] while attempting, in accordance with the books of Numa, to summon Jupiter from heaven by means of a sacrifice similar to that employed by him, was struck by lightning in consequence of his omission to follow certain forms with due exactness. Many other authors, too, have attested, that by the power of words a change has been effected in destinies and portents of the greatest importance. While they were digging on the Tarpeian Hill for the foundations of a temple, a human head was found; upon which deputies were sent to Olenus Calenus, the most celebrated diviner of Etruria. He, foreseeing the glory and success which

The immolation of the Gauls is supposed to have happened in the beginning of the reign of Vespasian.

[26] Originally the "Decemviri Sacris Faciundis," whose number was increased by Sylla to fifteen. They had the management of the Games of Apollo, and the Secular Games.

[27] In B. ii. c. 54.

[28] It has been suggested that Tullus Hostilius was acquainted with some of the secrets of electricity, and that he met his death while trying experiments with a lightning conductor. See B. ii. c. 54.

attached to such a presage as this, attempted, by putting a question to them, to transfer the benefit of it to his own nation. First describing, on the ground before him, the outline of a temple with his staff—"Is it so, Romans, as you say?" said he; "here then must be the temple[29] of Jupiter, all good and all powerful; it is here that we have found the head"—and the constant asseveration of the Annals is, that the destiny of the Roman empire would have been assuredly transferred to Etruria, had not the deputies, forewarned by the son of the diviner, made answer—"No, not here exactly, but at Rome, we say, the head was found."

It is related also that the same was the case when a certain four-horse chariot, made of clay, and intended for the roof of the same temple, had considerably increased while in the furnace;[30] and that on this occasion, in a similar manner, the destinies of Rome were saved. Let these instances suffice then to show, that the virtues of presages lie in our own hands, and that they are valuable in each instance according as they are received.[31] At all events, it is a principle in the doctrine of the augurs, that neither imprecations nor auspices of any kind have any effect upon those who, when entering upon an undertaking, declare that they will pay no attention whatever to them; a greater instance than which, of the indulgent disposition of the gods towards us, cannot be found.

And then besides, in the laws themselves of the Twelve Tables, do we not read the following words—"Whosoever shall have enchanted the harvest,"[32] and in another place, "Whosoever shall have used pernicious incantations";[33] Verrius Flaccus cites authors whom he deems worthy of credit, to show that on the occasion of a siege, it was the usage, the first thing of all, for the Roman priests to summon forth the tutelary divinity of that particular town, and to promise him the same rites, or even a more extended worship, at Rome; and at the present day even, this ritual still forms part of the discipline of our pontiffs.

[29] Ajasson thinks that there is an equivoque here upon the word "templum," which signified not only a building, but certain parts of the heavens, and corresponding lines traced on the earth by the augur's staff.

[30] This story is mentioned by Plutarch, in the Life of Publicola.

[31] In which case it was considered necessary to repeat the words, "Accipio omen," "I accept the omen."

[32] "Qui fruges excantassit."

[33] "Qui malum carmen incantassit."

Hence it is, no doubt, that the name[34] of the tutelary deity of Rome has been so strictly kept concealed, lest any of our enemies should act in a similar manner. There is no one, too, who does not dread being spell-bound by means of evil imprecations;[35] and hence the practice, after eating eggs or snails, of immediately breaking[36] the shells, or piercing them with the spoon. Hence, too, those love-sick imitations of enchantments which we find described by Theocritus among the Greeks, and by Catullus, and more recently, Virgil,[37] among our own writers. Many persons are fully persuaded that articles of pottery may be broken by a similar agency; and not a few are of opinion even that serpents can counteract incantations, and that this is the only kind of intelligence they possess—so much so, in fact, that by the agency of the magic spells of the Marsi, they may be attracted to one spot, even when asleep in the middle of the night. Some people go so far, too, as to write certain words[38] on the walls of houses, deprecatory of accident by fire.

But it is not easy to say whether the outlandish and unpronounceable words that are thus employed, or the Latin expressions that are used at random, and which must appear ridiculous to our judgment, tend the most strongly to stagger our belief—seeing that the human imagination is always conceiving something of the infinite, something deserving of the notice of the divinity, or indeed, to speak more correctly, something that must command his intervention perforce. Homer[39] tells us that Ulysses arrested the flow of blood from a wound

[34] Ajasson is of opinion that this name was either Favra or Fona, Acca, Flora, or Valesia or Valentia.

[35] "As in saying thus, The Devill take thee, or The Ravens peck out thine eyes, or I had rather see thee Pie peckt, and such like."—*Holland.*

[36] It is a superstition still practised to pierce the shell of an egg after eating it, "lest the witches should come." Holland gives the following Note—"Because afterwards no witches might pricke them with a needle in the name and behalfe of those whom they would hurt and mischeefe, according to the practice of pricking the images of any person in wax; used in the witchcraft of these daies." We learn from Ajasson that till recently it was considered a mark of ill-breeding in France not to pierce the shell after eating the egg. See also Brand's Popular Antiquities, Vol. III. p. 19, *Bohn's Ed.*

[37] See the Eighth Eclogue of Virgil.

[38] "That is to say, *Arse verse*, out of Afranius, as Festus noteth, which in the old Tuscane language signifieth, *Averte ignem*, Put backe the fire." —*Holland.*

[39] Odyss. xix. 457. It is not Ulysses, but the sons of Autolycus that do this. Their bandages, however, were more likely to be effectual.

in the thigh, by repeating a charm; and Theophrastus[40] says that sciatica may be cured by similar means. Cato[41] has preserved a formula for the cure of sprains, and M. Varro for that of gout. The Dictator Cæsar, they say, having on one occasion accidentally had a fall in his chariot,[42] was always in the habit, immediately upon taking his seat, of thrice repeating a certain formula, with the view of ensuring safety upon the journey; a thing that, to my own knowledge, is done by many persons at the present day.

### CHAP. 5.—A DESCRIPTION OF VARIOUS USAGES.

I would appeal, too, for confirmation on this subject, to the intimate experience of each individual. Why, in fact, upon the first day of the new year, do we accost one another with prayers for good fortune,[43] and, for luck's sake, wish each other a happy new year? Why, too, upon the occasion of public lustrations, do we select persons with lucky names, to lead the victims? Why, to counteract fascinations, do we Romans observe a peculiar form of adoration, in invoking the Nemesis of the Greeks; whose statue, for this reason, has been placed in the Capitol at Rome, although the goddess herself possesses no Latin name?[44] Why, when we make mention of the dead, do we protest that we have no wish[45] to impeach their good name?[46] Why is it that we entertain the belief that for every purpose odd numbers are the most effectual;[47]—a thing that is particularly observed with reference to the critical days in fevers? Why is it that, when gathering the earliest fruit, apples, or pears, as the case may be, we make a point of saying —"This fruit is old, may other fruit be sent us that is new?" Why is it that we salute[48] a person when he sneezes, an observance which Tiberius Cæsar, they say, the most unsociable of men, as we all know, used to exact, when riding in his chariot

[40] De Enthusiasmo.

[41] See B. xvii. c. 47.

[42] In passing along the Velabrum, on the occasion of his Gallic triumph, the axle of the carriage having broke.

[43] See Ovid's Fasti, B. i. l. 175, *et seq.*, and Epist. de Ponto. B. iv. El. 4. l. 23, *et seq.*

[44] See B. xi. c. 103.

[45] Hence the saying, "De mortuis nil nisi bonum."

[46] "Defunctorum memoriam a nobis non sollicitari."

[47] It is still a saying, and perhaps a belief, that "There is luck in odd numbers."

[48] This has been a practice from the earliest times to the present day. See Brand's Popular Antiquities, Vol. III. p. 123, *Bohn's Ed.*

even? Some there are, too, who think it a point religiously to be observed to mention the name as well of the person whom they salute.

And then, besides, it is a notion[49] universally received, that absent persons have warning that others are speaking of them, by the tingling of the ears. Attalus[50] assures us, that if a person, the moment he sees a scorpion, says "Duo,"[51] the reptile will stop short, and forbear to sting. And now that I am speaking of the scorpion, I recall to mind that in Africa no one ever undertakes any matter without prefacing with the word "Africa;" while in other countries, before an enterprise is commenced, it is the practice to adjure the gods that they will manifest their good will.

In addition to this, it is very clear that there are some religious observances, unaccompanied by speech, which are considered to be productive of certain effects. Thus,[52] when we are at table, for instance, it is the universal practice, we see, to take the ring from off the finger. Another person, again, will take some spittle from his mouth and place it with his finger behind the ear, to propitiate and modify disquietude of mind. When we wish to signify applause, we have a proverb even which tells us we should press the thumbs.[53] When paying adoration, we kiss the right hand, and turn the whole body to the right: while the people of the Gallic provinces, on the contrary, turn to the left, and believe that they show mere devoutness by so doing. To salute summer lightning with clapping of the hands, is the universal practice with all nations. If, when eating, we happen to make mention of a fire that has happened, we avert the inauspicious omen by pouring water beneath the table. To sweep the floor at the moment that a person is rising from table, or to remove the table or tray,[54] as the case may be, while a guest is drinking, is looked upon as a most unfortunate presage. There is a treatise,

[49] In France and England, at the present day, this notion, or rather, perhaps, the memory of it, is universally to be found. If the right ear tingles, some one is speaking well of us; if the left ear, the reverse.

[50] King Attalus Philometor. See end of B. viii.

[51] "Two."

[52] This passage, it is pretty clear, ought to follow the preceding one, though in the Latin it is made to precede.

[53] The thumb was turned upwards as a mark of favour, downwards, as a mark of disfavour.

[54] "Repositorium."

written by Servius Sulpicius, a man of the highest rank, in which reasons are given why we should never leave the table we are eating at; for in his day it was not yet[55] the practice to reckon more tables than guests at an entertainment. Where a person has sneezed, it is considered highly ominous for the dish or table to be brought back again, and not a taste thereof to be taken, after doing so; the same, too, where a person at table eats nothing at all.

These usages have been established by persons who entertained a belief that the gods are ever present, in all our affairs and at all hours, and who have therefore found the means of appeasing them by our vices even. It has been remarked, too, that there is never a dead silence on a sudden among the guests at table, except when there is an even number present; when this happens, too, it is a sign that the good name and repute of every individual present is in peril. In former times, when food fell from the hand of a guest, it was the custom to return it by placing it on the table, and it was forbidden[56] to blow upon it, for the purpose of cleansing it. Auguries, too, have been derived from the words or thoughts of a person at the moment such an accident befalls him; and it is looked upon as one of the most dreadful of presages, if this should happen to a pontiff, while celebrating the feast of Dis.[57] The proper expiation in such a case is, to have the morsel replaced on table, and then burnt in honour of the Lar.[58] Medicines, it is said, will prove ineffectual, if they happen to have been placed on a table before they are administered. It is religiously believed by many, that it is ominous in a pecuniary point of view, for a person to pare his nails without speaking, on the market days[59] at Rome, or to begin at the forefinger[60] in doing so: it is thought, too,

[55] It was not yet the custom to bring in several courses, each served up on a separate table.

[56] Good manners possibly, more than superstition, may have introduced this practice.

[57] Or Pluto. He alludes to the Feralia, or feasts celebrated, in the month of February, in honour of the dead.

[58] Or household god.

[59] The "Nundinæ," held every ninth day; or rather every *eighth* day, according to *our* mode of reckoning.

[60] Gronovius suggests a reading which would make this to mean that it is "ominous to touch money with the forefinger." It does not appear to be warranted, however.

to be a preventive of baldness and of head-ache, to cut the hair on the seventeenth and twenty-ninth[60] days of the moon.

A rural law observed in most of the farms of Italy, forbids[61] women to twirl their distaffs, or even to carry them uncovered, while walking in the public roads; it being a thing so prejudicial to all hopes and anticipations, those of a good harvest[62] in particular. It is not so long ago, that M. Servilius Nonianus, the principal citizen at Rome,[63] being apprehensive of ophthalmia, had a paper, with the two Greek letters P and A[64] written upon it, wrapped in linen and attached to his neck, before he would venture to name the malady, and before any other person had spoken to him about it. Mucianus, too, who was thrice consul, following a similar observance, carried about him a living fly, wrapped in a piece of white linen; and it was strongly asserted, by both of them, that to the use of these expedients they owed their preservation from ophthalmia. There are in existence, also, certain charms against hail-storms, diseases of various kinds, and burns, some of which have been proved, by actual experience, to be effectual; but so great is the diversity of opinion upon them, that I am precluded by a feeling of extreme diffidence from entering into further particulars, and must therefore leave each to form his own conclusions as he may feel inclined.

CHAP. 6. (3.)—TWO HUNDRED AND TWENTY-SIX OBSERVATIONS ON REMEDIES DERIVED FROM MAN. EIGHT REMEDIES DERIVED FROM CHILDREN.

We have already,[65] when speaking of the singular peculiarities of various nations, made mention of certain men of a monstrous nature, whose gaze is endowed with powers of fascination; and we have also described properties belonging to numerous animals, which it would be superfluous here to repeat. In some men, the whole of the body is endowed with remarkable properties, as in those families, for instance, which are a terror to serpents; it being in their power to cure persons when stung, either by the touch or by a slight suction of the wound. To this class belong the Psylli, the Marsi, and the people

[60] *Twenty-eighth*, according to *our* reckoning.

[61] Probably from their ominous resemblance to the Parcæ, or Fates, with their spindles.

[62] "Frugum."

[63] "Princeps civitatis."

[64] "Rho" and "Alpha."

[65] In B. vii. c. 2.

called "Ophiogenes,"[66] in the Isle of Cyprus. One Euagon, a member of this family, while attending upon a deputation at Rome, was thrown by way of experiment, by order of the consuls, into a large vessel[67] filled with serpents; upon which, to the astonishment of all, they licked his body all over with their tongues. One peculiarity of this family—if indeed it is still in existence—is the strong offensive smell which proceeds from their body in the spring; their sweat, too, no less than their spittle, was possessed of remedial virtues. The people who are born at Tentyris, an island in the river Nilus, are so formidable[68] to the crocodiles there, that their voice even is sufficient to put them to flight. The presence even, it is well known, of all these different races, will suffice for the cure of injuries inflicted by the animals to which they respectively have an antipathy; just in the same way that wounds are irritated by the approach of persons who have been stung by a serpent at some former time, or bitten by a dog. Such persons, too, by their presence, will cause the eggs upon which a hen is sitting to be addled, and will make pregnant cattle cast their young and miscarry; for, in fact, so much of the venom remains in their body, that, from being poisoned themselves, they become poisonous to other creatures. The proper remedy in such case is first to make them wash their hands, and then to sprinkle with the water the patient who is under medical treatment. When, again, persons have been once stung by a scorpion they will never afterwards be attacked by hornets, wasps, or bees: a fact at which a person will be the less surprised when he learns that a garment which has been worn at a funeral will never be touched by moths;[69] that it is hardly possible to draw serpents from their holes except by using the left hand; and that, of the discoveries made by Pythagoras, one of the most unerring, is the fact, that in the name given to infants, an odd number of vowels is portentous of lameness, loss of eyesight, or similar accidents, on[70] the right

[66] In B. vii. c. 2, he speaks of these people—"the serpent-born"—as natives of Parium, a town of the Hellespont. Ajasson suggests that they may have been a branch of the Thamirades, a sacerdotal family of Cyprus.

[67] "Dolium." [68] See B. viii. c. 38.

[69] Ajasson has thought it worth while to contradict this assertion.

[70] Meaning, of course, *in case* such an accident should befall the party. The passage appears, however, to be corrupt.

side of the body, and an even number of vowels of the like infirmities on the left.

(4.) It is said, that if a person takes a stone or other missile which has slain three living creatures, a man, a boar, and a bear, at three blows, and throws it over the roof of a house in which there is a pregnant woman, her delivery, however difficult, will be instantly accelerated thereby. In such a case, too, a successful result will be rendered all the more probable, if a light infantry lance[71] is used, which has been drawn from a man's body without touching the earth; indeed, if it is brought into the house it will be productive of a similar result. In the same way, too, we find it stated in the writings of Orpheus and Archelaüs, that arrows, drawn from a human body without being allowed to touch the ground, and placed beneath the bed, will have all the effect of a philtre; and, what is even more than this, that it is a cure for epilepsy if the patient eats the flesh of a wild beast killed with an iron weapon with which a human being has been slain.

Some individuals, too, are possessed of medicinal properties in certain parts of the body; the thumb of King Pyrrhus, for instance, as already[72] mentioned. At Elis, there used to be shown one of the ribs[73] of Pelops, which, it was generally asserted, was made of ivory. At the present day even, there are many persons, who from religious motives will never clip the hair growing upon a mole on the face.

### CHAP. 7.—PROPERTIES OF THE HUMAN SPITTLE.

But it is the fasting spittle of a human being, that is, as already[74] stated by us, the sovereign preservative against the poison of serpents; while, at the same time, our daily experience may recognize its efficacy and utility,[75] in many other respects. We are in the habit of spitting,[76] for instance, as a preservative from epilepsy, or in other words, we repel contagion thereby:

[71] "Hasta velitaris."

[72] In B. vii. c. 2.

[73] It is the *shoulder-blade* of Pelops that is generally mentioned in the ancient Mythology. Pliny omits to say of what medicinal virtues it was possessed.

[74] In B. vii. c. 2.

[75] It certainly does seem to be possessed of some efficacy for the removal of spots and stains, but for no other purpose probably.

[76] In some parts of France, the peasants spit in the hand when in terror of spectres at night. In our country, prize-fighters spit in the hand before beginning the combat, and costermongers spit on their morning's handsel, or first earned money, for good luck.

in a similar manner, too, we repel fascinations, and the evil presages attendant upon meeting a person who is lame in the right leg. We ask pardon of the gods, by spitting in[77] the lap, for entertaining some too presumptuous hope or expectation.[78] On the same principle, it is the practice in all cases where medicine is employed, to spit three times on the ground, and to conjure the malady as often; the object being to aid the operation of the remedy employed. It is usual, too, to mark a boil, when it first makes its appearance, three times with fasting[79] spittle. What we are going to say is marvellous, but it may easily be tested[80] by experiment: if a person repents of a blow given to another, either by hand or with a missile, he has nothing to do but to spit at once into the palm of the hand which has inflicted the blow, and all feelings[81] of resentment will be instantly alleviated in the person struck. This, too, is often verified in the case of a beast of burden, when brought on its haunches with blows; for upon this remedy being adopted, the animal will immediately step out and mend its pace. Some persons, however, before making an effort, spit into the hand in manner above stated, in order to make the blow more heavy.[82]

We may well believe, then, that lichens and leprous spots may be removed by a constant application of fasting spittle; that ophthalmia may be cured by anointing, as it were, the eyes every morning with fasting spittle; that carcinomata may be effectually treated, by kneading the root of the plant known as "apple of the earth,"[83] with human spittle; that crick in the neck may be got rid of by carrying fasting spittle to the right knee with the right hand, and to the left knee with the left; and that when an insect has got into the ear, it

[77] "In sinum." [78] See Juvenal, Sat. v. l. 112.

[79] Ajasson remarks that the human spittle contains hydrochlorate of soda and potash; the remedial virtues of which, however, would be infinitely small.

[80] A quibble, Ajasson remarks. Did Pliny ever test it himself? He would seem to imply it.

[81] "Levatur illico in percusso culpa."

[82] This is still the case with pugilists, and persons requiring to use strong exertion. It is based, however, on a mere superstition, as Ajasson remarks.

[83] "Malum terræ." See B. xxv. c. 54, and B. xxvi. c. 56. Littré translates "malum," "apple," in the former passage; but here he calls it "curse of the earth."

is quite sufficient to spit into that organ, to make it come out. Among the counter-charms too, are reckoned, the practice of spitting into the urine the moment it is voided, of spitting into the shoe of the right foot before putting it on, and of spitting while a person is passing a place in which he has incurred any kind of peril.

Marcion of Smyrna, who has written a work on the virtues of simples, informs us that the sea scolopendra will burst asunder if spit upon; and that the same is the case with bramble-frogs,[84] and other kinds of frogs. Opilius says that serpents will do the same, if a person spits into their open mouth; and Salpe tells us, that when any part of the body is asleep, the numbness may be got rid of by the person spitting into his lap, or touching the upper eyelid with his spittle. If we are ready to give faith to such statements as these, we must believe also in the efficacy of the following practices: upon the entrance of a stranger, or when a person looks at an infant while asleep, it is usual for the nurse to spit three times upon the ground; and this, although infants are under the especial guardianship of the god Fascinus,[85] the protector, not of infants only, but of generals as well, and a divinity whose worship is entrusted to the Vestal virgins, and forms part of the Roman rites. It is the image of this divinity that is attached beneath the triumphant car of the victorious general, protecting him, like some attendant physician, against the effects of envy;[86] while, at the same time, equally salutary is the advice of the tongue, which warns him to be wise in time,[87] that so Fortune

[84] "Rubetas." See B. viii. c. 48, B. xi. cc. 19, 76, and 116, and B. xxv. c. 76.

[85] This divinity was identical with Mutinus or Tutinus, and was worshipped under the form of a phallus, the male generative organ. As the guardian of infants, his peculiar form is still unconsciously represented in the shape of the coral bauble with which infants are aided in cutting their teeth.

[86] Hence the expression "præfiscini," "Be it said without envy," supposed to avert the effects of the envious eye, fascination, or enchantment.

[87] "Resipiscere" seems to be a preferable reading to "respicere," adopted by Sillig. This passage is evidently in a very corrupt state; but it is most probable that reference is made to the attendant who stood behind the general in his triumph, and reminded him that he was a man—or, according to Tzetzes, bade him look behind him. Pliny speaks of a servant attending the triumphant general, with a golden crown, in B. xxxiii. c. 4. Hardouin attempts another explanation, but a very confused and improbable one.

may be prevailed upon by his prayers, not to follow, as the destroyer of his glory, close upon his back.

### CHAP. 8.—REMEDIES DERIVED FROM THE WAX OF THE HUMAN EAR.

The human bite is also looked upon as one of the most dangerous of all. The proper remedy for it is human ear-wax: a thing that we must not be surprised at, seeing that, if applied immediately, it is a cure for the stings of scorpions even, and serpents. The best, however, for this purpose, is that taken from the ears of the wounded person. Agnails, too, it is said, may be cured in a similar manner. A human tooth, reduced to powder, is a cure, they say, for the sting of a serpent.

### CHAP. 9.—REMEDIES DERIVED FROM THE HUMAN HAIR, TEETH, ETC.

The first hair, it is said, that is cut from an infant's head, and, in fact, the hair of all persons that have not reached the age of puberty, attached to the limbs, will modify the attacks of gout. A man's hair, applied with vinegar, is a cure for the bite of a dog, and, used with oil or wine, for wounds on the head. It is said, too, if we choose to believe it, that the hair of a man torn down from the cross, is good for quartan fevers. Ashes, too, of burnt human hair are curative of carcinomata. If a woman takes the first tooth that a child has shed, provided it has not touched the ground, and has it set in a bracelet, and wears it constantly upon her arm, it will preserve her from all pains in the uterus and adjacent parts. If the great toe is tied fast to the one next to it, it will reduce tumours in the groin; and if the two middle fingers of the right hand are slightly bound together with a linen thread, it will act as a preservative against catarrhs and ophthalmia. A stone, it is said, that has been voided by a patient suffering from calculi, if attached to the body above the pubes, will alleviate the pains of others similarly afflicted, as well as pains in the liver; it will have the effect, also, of facilitating delivery. Granius[88] adds, however, that for this last purpose, the stone will be more efficacious if it has been extracted with the knife. Delivery, when near at hand, will be accelerated, if the man by whom

[88] See end of the present Book.

the woman has conceived, unties his girdle, and, after tying it round her, unties it, adding at the same time this formula, "I have tied it, and I will untie it," and then taking his departure.

### CHAP. 10.—REMEDIES DERIVED FROM THE HUMAN BLOOD, THE SEXUAL CONGRESS, ETC.

The blood of the human body, come from what part it may, is most efficacious, according to Orpheus and Archelaüs, as an application for quinzy: they say, too, that if it is applied to the mouth of a person who has fallen down in a fit of epilepsy, he will come to himself immediately. Some say that, for epilepsy, the great toes should be pricked, and the drops of blood that exude therefrom applied to the face; or else, that a virgin should touch the patient with her right thumb—a circumstance that has led to the belief that persons suffering from epilepsy should eat the flesh of animals in a virgin state. Æschines of Athens used to cure quinzy, carcinoma, and affections of the tonsillary glands and uvula, with the ashes of burnt excrements, a medicament to which he gave the name of "botryon."[89]

There are many kinds of diseases which disappear entirely after the first sexual congress,[90] or, in the case of females, at the first appearance of menstruation; indeed, if such is not the case, they are apt to become chronic, epilepsy in particular. Even more than this—a man, it is said, who has been stung by a serpent or scorpion, experiences relief from the sexual congress; but the woman, on the other hand, is sensible of detriment. We are assured, too, that if persons, when washing their feet, touch the eyes three times with the water, they will never be subject to ophthalmia or other diseases of the eyes.

### CHAP. 11.—REMEDIES DERIVED FROM THE DEAD.

Scrofula, imposthumes of the parotid glands, and throat diseases, they say, may be cured by the contact of the hand of a person who has been carried off by an early death: indeed there are some who assert that any dead body will produce the same effect, provided it is of the same sex as the patient, and

[89] Properly meaning "a cluster of grapes."

[90] Ajasson remarks that there is a considerable degree of truth in this assertion. He gives a long list of French works on the subject.

that the part affected is touched with the back of the left hand.[91] To bite off a piece from wood that has been struck by lightning, the hands being held behind the back, and then to apply it to the tooth, is a sure remedy, they say, for tooth-ache. Some persons recommend the tooth to be fumigated with the smoke of a burnt tooth, which has belonged to another person of the same sex; or else to attach to the person a dog-tooth, as it is called, which has been extracted from a body before burial. Earth, they say, taken from out of a human skull, acts as a depilatory to the eyelashes; it is asserted, also, that any plant which may happen to have grown there, if chewed, will cause the teeth to come out; and that if a circle is traced round an ulcer with a human bone, it will be effectually prevented from spreading.

Some persons, again, mix water in equal proportions from three different wells, and, after making a libation with part of it in a new earthen vessel, administer the rest to patients suffering from tertian fever, when the paroxysms come on. So, too, in cases of quartan fever, they take a fragment of a nail from a cross, or else a piece of a halter[92] that has been used for crucifixion, and, after wrapping it in wool, attach it to the patient's neck; taking care, the moment he has recovered, to conceal it in some hole to which the light of the sun cannot penetrate.

## CHAP. 12.—VARIOUS REVERIES AND DEVICES OF THE MAGICIANS.

The following are some of the reveries of magic.[93] A whetstone upon which iron tools have been frequently sharpened, if put, without his being aware of it, beneath the pillow of a person sinking under the effects of poison, will make him give evidence and declare what poison has been administered, and at what time and place, though at the same time he will not disclose the author of the crime. When a person has been struck by lightning, if the body is turned upon the side which has sustained the injury, he will instantly recover the power

[91] This superstition still exists among the lower classes of this country, with reference to the beneficial effects of stroking neck diseases with the hand of a man who has been hanged.

[92] Made of "spartum." See B. xix. cc. 6, 7.

[93] Of which the Persian Magi were the most noted professors.

of speech—that is quite certain.[94] For the cure of inguinal tumours, some persons take the thrum of an old web, and after tying seven or nine knots in it, mentioning at each knot the name of some widow woman or other, attach it to the part affected. To assuage the pain of a wound, they recommend the party to take a nail or any other substance that has been trodden under foot, and to wear it, attached to the body with the thrum of a web. To get rid of warts, some lie in a footpath with the face upwards, when the moon is twenty days old at least, and after fixing their gaze upon it, extend their arms above the head, and rub themselves with anything within their reach. If a person is extracting a corn at the moment that a star shoots, he will experience an immediate cure,[95] they say. By pouring vinegar upon the hinges of a door, a thick liniment is formed, which, applied to the forehead, will alleviate headache: an effect equally produced, we are told, by binding the temples with a halter with which a man has been hanged. When a fish-bone happens to stick in the throat, it will go down immediately, if the person plunges his feet into cold water; but where the accident has happened with any other kind of bone, the proper remedy is to apply to the head some fragments of bones taken from the same dish. In cases where bread has stuck in the throat, the best plan is to take some of the same bread, and insert it in both ears.

### CHAP. 13.—REMEDIES DERIVED FROM THE HUMAN EXCRETIONS.

In Greece, where everything is turned to account, the owners of the gymnasia have introduced the very excretions[96] even of the human body among the most efficient remedies; so much so, indeed, that the scrapings from the bodies of the athletes are looked upon as possessed of certain properties of an emollient, calorific, resolvent, and expletive nature, resulting from the compound of human sweat and oil. These scrapings are used, in the form of a pessary, for inflammations and contractions of the uterus: similarly employed, they act as an emmenagogue, and are useful for reducing condylomata and inflammations of the rectum, as also for assuaging pains

[94] The "constat" here, whether it belongs to the magicians, or to Pliny himself, is highly amusing, as Ajasson remarks.

[95] Sillig appears to be right in his conjecture that the "vel" here should be omitted.

[96] See B. xv. c. 5.

in the sinews, sprains, and nodosities of the joints. The scrapings obtained from the baths are still more efficacious for these purposes, and hence it is that they form an ingredient in maturative preparations. Such scrapings as are impregnated with wrestlers' oil,[97] used in combination with mud, have a mollifying effect upon the joints, and are more particularly efficacious as a calorific and resolvent; but in other respects their properties are not so strongly developed.

The shameless and disgusting researches that have been made will quite transcend all belief, when we find authors of the very highest repute proclaiming aloud that the male seminal fluid is a sovereign remedy for the sting of the scorpion! In the case too, of women afflicted with sterility, they recommend the application of a pessary, made of the first excrement that is voided by an infant at the moment of its birth; the name they give it is "meconium."[98] They have even gone so far, too, as to scrape the very filth from off the walls of the gymnasia, and to assert that this is also possessed of certain calorific properties. These scrapings are used as a resolvent for inflamed tumours, and are applied topically to ulcers upon aged people and children, and to excoriations and burns.

## CHAP. 14.—REMEDIES DEPENDING UPON THE HUMAN WILL.

It would be the less becoming then for me to omit all mention of the remedies which depend upon the human will. Total abstinence from food or drink, or from wine only, from flesh, or from the use of the bath, in cases where the health requires any of these expedients, is looked upon as one of the most effectual modes of treating diseases. To this class of remedies must be added bodily exercise, exertion of the voice,[99] anointings, and frictions according to a prescribed method: for powerful friction, it should be remembered, has a binding effect upon the body, while gentle friction, on the other hand, acts as a laxative; so too, repeated friction reduces the body, while used in moderation it has a tendency to make flesh. But the most beneficial practice of all is to take walking

[97] "Ceroma." A mixture of oil and wax.

[98] Properly, "poppy juice."

[99] Or "clara lectio," "reading aloud," as Celsus calls it, recommending it for persons of slow digestion.

or carriage[1] exercise; this last being performed in various ways. Exercise on horseback is extremely good for affections of the stomach and hips, a voyage for phthisis,[2] and a change of locality[3] for diseases of long standing. So, too, a cure may sometimes be effected by sleep, by a recumbent position in bed, or by the use of emetics in moderation. To lie upon the back is beneficial to the sight, to lie with the face downwards is good for a cough, and to lie on the side is recommended for patients suffering from catarrh.

According to Aristotle and Fabianus, it is towards spring and autumn that we are most apt to dream; and they tell us that persons are most liable to do so when lying on the back, but never when lying with the face downwards. Theophrastus assures us that the digestion is accelerated by lying on the right side; while, on the other hand, it is retarded by lying with the face upwards. The most powerful, however, of all remedies, and one which is always at a person's own command, is the sun: violent friction, too, is useful by the agency of linen towels and body-scrapers.[4] To pour warm water on the head before taking the vapour-bath, and cold water after it, is looked upon as a most beneficial practice; so, too, is the habit of taking cold water before food, of drinking it every now and then while eating, of taking it just before going to sleep, and, if practicable, of waking every now and then, and taking a draught. It is worthy also of remark, that there is no living creature but man[5] that is fond of hot drinks, a proof that they are contrary to nature. It has been ascertained by experiment, that it is a good plan to rinse the mouth with undiluted wine, before going to sleep, for the purpose of sweetening the breath; to rinse the mouth with cold water an odd number of times every morning, as a preservative against tooth-ache; and to wash the eyes with oxycrate, as a preventive of ophthalmia. It has been remarked also, that the general health is improved by a varying regimen, subject to no fixed rules.

[1] "Gestatio." Exercise on horseback, in a carriage drawn by horses, or in a litter. See B. xxvi. c. 7.

[2] See B. xxxi. c. 33. A sea voyage, to Madeira, for instance, is still recommended for consumptive patients.

[3] Change of locality is still recommended for diseases of the spleen, as they are called.

[4] "Strigilium."

[5] Except monkeys and some domesticated animals, Ajasson remarks.

(5.) Hippocrates informs us that the viscera of persons who do not take the morning meal[6] become prematurely aged and feeble; but then he has pronounced this aphorism, it must be remembered, by way of suggesting a healthful regimen, and not to promote gluttony; for moderation in diet is, after all, the thing most conducive to health. L. Lucullus gave charge to one of his slaves to overlook him in this respect; and, a thing that reflected the highest discredit on him, when, now an aged man and laden with triumphs, he was feasting in the Capitol even, his hand had to be removed from the dish to which he was about to help himself. Surely it was a disgrace for a man to be governed by his own slave[7] more easily than by himself!

### CHAP. 15. (6.)—REMEDIES DERIVED FROM SNEEZING.

Sneezing, provoked by a feather, relieves heaviness in the head; it is said too, that to touch the nostrils of a mule with the lips, will arrest sneezing and hiccup. For this last purpose, Varro recommends us to scratch the palm, first of one hand and then of the other; while many say that it is a good plan to shift the ring from off the left hand to the longest finger of the right, and then to plunge the hands into hot water. Theophrastus says, that aged persons sneeze with greater difficulty than others.

### CHAP. 16.—REMEDIES DERIVED FROM THE SEXUAL CONGRESS.

Democritus spoke in condemnation of the sexual congress, as[8] being merely an act through which one human being springs from another; and really, by Hercules! the more rarely it is used the better. Still however, athletes, we find, when they become dull and heavy, are re-established by it: the voice, too, is restored by it, when from being perfectly clear, it has degenerated into hoarseness. The congress of the sexes is a cure also for pains in the loins, dimness of the eyesight,[9] alienation of the mental difficulties, and melancholy.

[6] "Non prandentium."

[7] Callisthenes the physician is the person supposed to be alluded to. Lucullus did not seem to be of opinion that a man "must be a fool or a physician at forty."

[8] "Ut in quâ homo alius exsiliret ex homine." The true meaning of this it seems impossible, with certainty, to ascertain: though a more indelicate one than that given might be easily suggested.

[9] On the contrary, some authorities say that it is apt to cause dimness of sight.

CHAP. 17.—VARIOUS OTHER REMEDIES.

To sit by a pregnant woman, or by a person to whom any remedy is being administered, with the fingers of one hand inserted between those of the other, acts as a magic spell; a discovery that was made, it is said, when Alcmena[10] was delivered of Hercules. If the fingers are thus joined, clasping one or both knees, or if the ham of one leg is first put upon the knee of the other, and then changed about, the omen is of still worse signification. Hence it is, that in councils held by generals and persons in authority, our ancestors forbade these postures, as being an impediment to all business.[11] They have given a similar prohibition also with reference to sacrifices and the offering of public vows; but as to the usage of uncovering the head in presence of the magistrates, that has been enjoined, Varro says, not as a mark of respect, but with a view to health, the head being strengthened[12] by the practice of keeping it uncovered.

When anything has got into the eye, it is a good plan to close the other; and when water has got into the right ear, the person should hop about on the left foot, with the head reclining upon the right shoulder, the reverse being done when the same has happened to the left ear. If the secretion of the phlegm produces coughing, the best way of stopping it is for another person to blow in the party's face. When the uvula is relaxed, another person should take the patient with his teeth by the crown,[13] and lift him from the ground; while for pains in the neck, the hams should be rubbed, and for pains in the hams the neck. If a person is seized in bed with cramp in the sinews of the legs or thighs, he should set his feet upon the ground: so, too, if he has cramp on the left side, he should take hold of the great toe of the left foot with the right hand, and if on the right side, the great toe of the right foot with the left hand. For cold shiverings or for excessive bleeding at the nostrils, the extremities of the body should be well rubbed with sheep's wool. To arrest incontinence of urine, the extremities of the generative organs should

[10] See Ovid, Met. ix. 273, *et seq.*

[11] Much more probably, because they were considered to be significant of anything but seriousness and attention.

[12] Exemplified in the case of the Egyptians, Herodotus says.

[13] The remedy would seem to be worse than the evil.

be tied with a thread of linen or papyrus, and a binding passed round the middle of the thigh. For derangement of the stomach, it is a good plan to press the feet together, or to plunge the hands into hot water.

In addition to all this, in many cases it is found highly beneficial to speak but little; thus, for instance, Mæcenas Melissus,[14] we are told, enjoined silence on himself for three years, in consequence of spitting blood after a convulsive fit. When a person is thrown from a carriage, or when, while mounting an elevation or lying extended at full length, he is menaced with any accident, or if he receives a blow, it is singularly beneficial to hold the breath; a discovery for which we are indebted to an animal, as already[15] stated.

To thrust an iron nail into the spot where a person's head lay at the moment he was seized with a fit of epilepsy, is said to have the effect of curing him of that disease. For pains in the kidneys, loins, or bladder, it is considered highly soothing to void the urine lying on the face at full length in a reclining bath. It is quite surprising how much more speedily wounds will heal if they are bound up and tied with a Hercules' knot:[16] indeed, it is said, that if the girdle which we wear every day is tied with a knot of this description, it will be productive of certain beneficial effects, Hercules having been the first to discover the fact.

Demetrius, in the treatise which he has compiled upon the number Four, alleges certain reasons why drink should never be taken in proportions of four cyathi or sextarii. As a preventive of ophthalmia, it is a good plan to rub the parts behind the ears, and, as a cure for watery eyes, to rub the forehead. As to the presages which are derived from man himself, there is one to the effect that so long as a person is able to see himself reflected in the pupil of the patient's eye, there need be no apprehension of a fatal termination to the malady.

## CHAP. 18.—REMEDIES DERIVED FROM THE URINE.

The urine,[17] too, has been the subject not only of numerous

[14] See end of B. vii.

[15] In B. viii. c. 58.

[16] A knot tied very hard, and in which no ends were to be seen.

[17] This excretion was, till lately, thought of great importance, as indicative of the health of the patient.

theories with authors, but of various religious observances as well, its properties being classified under several distinctive heads: thus, for instance, the urine of eunuchs, they say, is highly beneficial as a promoter of fruitfulness in females. But to turn to those remedies which we may be allowed to name without impropriety—the urine of children who have not arrived at puberty is a sovereign remedy for the poisonous secretions of the asp known as the "ptyas,"[18] from the fact that it spits its venom into the eyes of human beings. It is good, too, for the cure of albugo, films and marks upon the eyes, white specks[19] upon the pupils, and maladies of the eyelids. In combination with meal of fitches, it is used for the cure of burns, and, with a head of bulbed leek, it is boiled down to one half, in a new earthen vessel, for the treatment of suppurations of the ears, or the extermination of worms breeding in those organs: the vapour, too, of this decoction acts as an emmenagogue. Salpe recommends that the eyes should be fomented with it, as a means of strengthening the sight; and that it should be used as a liniment for sun scorches, in combination with white of egg, that of the ostrich being the most effectual, the application being kept on for a couple of hours.

Urine is also used for taking out ink spots. Male urine cures gout, witness the fullers for instance,[20] who, for this reason, it is said, are never troubled with that disease. With stale urine some mix ashes of calcined oyster-shells, for the cure of eruptions on the bodies of infants, and all kinds of running ulcers: it is used, too, as a liniment for corrosive sores, burns, diseases of the rectum, chaps upon the body, and stings inflicted by scorpions. The most celebrated midwives have pronounced that there is no lotion which removes itching sensations more effectually; and, with the addition of nitre,[21] they prescribe it for the cure of ulcers of the head, porrigo, and cancerous sores, those of the generative organs in particular. But the fact is, and there is no impropriety in saying so, that every person's own urine is the best for his own case, due

[18] From the Greek πτυὼ, "to spit."

[19] "Argema."

[20] Who had to use *lant*, or stale urine, in their business.

[21] At a future period we shall have to discuss the identity of the "nitrum" of Pliny. See B. xxxi. c. 46.

care being taken to apply it immediately, and unmixed with anything else; in such cases as the bite of a dog, for instance, or the quill of a hedge-hog entering the flesh, a sponge or some wool being the vehicle in which it is applied. Kneaded up with ashes, it is good for the bite of a mad dog, and for the cure of stings inflicted by serpents. As to the bite of the scolopendra, the effects of urine are said to be quite marvellous—the person who has been injured has only to touch the crown of his head with a drop of his own urine, and he will experience an instantaneous cure.

### CHAP. 19.—INDICATIONS OF HEALTH DERIVED FROM THE URINE.

Certain indications of the health are furnished by the urine. Thus, for example, if it is white at first in the morning and afterwards high-coloured, the first signifies that the digestion is going on, the last that it is completed. When the urine is red, it is a bad sign; but when it is swarthy, it is the worst sign of all. So, too, when it is thick or full of bubbles, it is a bad sign; and when a white sediment forms, it is a symptom of pains in the region of the viscera or in the joints. A green-coloured urine is indicative of disease of the viscera, a pale urine of biliousness, and a red urine of some distemper in the blood. The urine is in a bad state, too, when certain objects form in it, like bran or fine clouds in appearance. A thin, white, urine also is in a diseased state; but when it is thick and possessed of an offensive smell, it is significant of approaching death: so, too, when with children it is thin and watery.

The adepts in magic expressly forbid a person, when about to make water, to uncover the body in the face of the sun[22] or moon, or to sprinkle with his urine the shadow of any object whatsoever. Hesiod[23] gives a precept, recommending persons to make water against an object standing full before them, that no divinity may be offended by their nakedness being uncovered. Osthanes maintains that every one who drops some urine upon his foot in the morning will be proof against all noxious medicaments.

### CHAP. 20. (7.)—FORTY-ONE REMEDIES DERIVED FROM THE FEMALE SEX.

The remedies said to be derived from the bodies of females

[22] This was also one of the Pythagorean precepts.
[23] Works and Days, l. 727, *et seq.*

closely approach the marvellous nature of prodigies; to say nothing of still-born infants cut up limb by limb for the most abominable practices, expiations made with the menstrual discharge, and other devices which have been mentioned, not only by midwives but by harlots[24] even as well! The smell of a woman's hair, burnt, will drive away serpents, and hysterical suffocations, it is said, may be dispelled thereby. The ashes of a woman's hair, burnt in an earthen vessel, or used in combination with litharge, will cure eruptions and prurigo of the eyes: used in combination with honey they will remove warts and ulcers upon infants; with the addition of honey and frankincense, they will heal wounds upon the head, and fill up all concavities left by corrosive ulcers; used with hogs' lard, they will cure inflammatory tumours and gout; and applied topically to the part affected, they will arrest erysipelas and hæmorrhage, and remove itching pimples on the body which resemble the stings of ants.

### CHAP. 21.—REMEDIES DERIVED FROM WOMAN'S MILK.

As to the uses to which woman's milk has been applied, it is generally agreed that it is the sweetest and the most delicate of all, and that it is the best[25] of remedies for chronic fevers and cœliac affections, when the woman has just weaned her infant more particularly. In cases, too, of sickness at stomach, fevers, and gnawing sensations, it has been found by experience to be highly beneficial; as also, in combination with frankincense, for abscesses of the mamillæ. When the eyes are bloodshot from the effects of a blow, or affected with pain or defluxion, it is a very good plan to inject woman's milk into them, more particularly in combination with honey and juice of daffodil, or else powdered frankincense. In all cases, however, the milk of a woman who has been delivered of a male child is the most efficacious, and still more so if she has had male twins; provided always she abstains from wine and food of an acrid nature. Mixed with the white of an egg in a liquid state, and applied to the forehead in wool, it arrests

[24] The use of the word "prodidere" shows that treatises had been written on these abominable subjects. Laïs, Elephantis, and Salpe were probably the "meretrices" to whom he here alludes. See c. 23, and the end of this Book.

[25] There is probably no foundation for this assertion.

defluxions of the eyes. If a frog[26] has spirted its secretions[27] into the eye, woman's milk is a most excellent remedy; and for the bite of that reptile it is used both internally and externally.

It is asserted that if a person is rubbed at the same moment with the milk of both mother and daughter, he will be proof for the rest of his life against all affections of the eyes. Mixed with a small quantity of oil, woman's milk is a cure for diseases of the ears; and if they are in pain from the effects of a blow, it is applied warm with goose-grease. If the ears emit an offensive smell, a thing that is mostly the case in diseases of long standing, wool is introduced into those organs, steeped in woman's milk and honey. While symptoms of jaundice are still visible in the eyes, woman's milk is injected, in combination with elaterium.[28] Taken as a drink, it is productive of singularly good effects, where the poison of the sea-hare, the buprestis,[29] or, as Aristotle tells us, the plant dorycnium[30] has been administered; as a preventive also of the madness produced by taking henbane. Woman's milk also, mixed with hemlock, is recommended as a liniment for gout; while some there are who employ it for that purpose in combination with wool-grease[31] or goose-grease; a form in which it is used as an application for pains in the uterus. Taken as a drink, it arrests diarrhœa, Rabirius[32] says, and acts as an emmenagogue; but where the woman has been delivered of a female child, her milk is of use only for the cure of face diseases.

Woman's milk is also a cure for affections of the lungs; and, mixed with the urine of a youth who has not arrived at puberty, and Attic honey, in the proportion of one spoonful of each, it removes singing in the ears, I find. Dogs which have once tasted the milk of a woman who has been delivered of a male child, will never become mad, they say.

[26] "Rana." He means the "rubeta" probably, or "bramble-frog," so often mentioned by him. See Note 84, p. 290.

[27] "Salivam."

[28] See B. xx. c. 2.

[29] See B. xxx. c. 10. Latreille has written a very able treatise on the Buprestis of the ancients, and considers it to belong to the family of Cantharides. *Annales du Museum d'histoire Naturelle*, Vol. xix. p. 129, *et seq.*

[30] Convolvulus dorycnium; see B. xxi. c. 105, and B. xxiii. c. 18.

[31] "Œsypum." See B. xxx. c. 23.

[32] Possibly the Epic writer of that name, mentioned by Ovid, Seneca, Quintilian, and Velleius Paterculus.

CHAP. 22.—REMEDIES DERIVED FROM THE SPITTLE OF FEMALES.

A woman's fasting spittle is generally considered highly efficacious for bloodshot eyes: it is good also for defluxions of those organs, the inflamed corners of the eyes being moistened with it every now and then; the result, too, is still more successful, if the woman has abstained from food and wine the day before.

I find it stated that head-ache may be alleviated by tying a woman's fillet[33] round the head.

CHAP. 23.—FACTS CONNECTED WITH THE MENSTRUAL DISCHARGE.

Over and above these particulars, there is no limit to the marvellous powers attributed to females. For, in the first place, hailstorms, they say, whirlwinds, and lightning[34] even, will be scared away by a woman uncovering her body while her monthly courses are upon her. The same, too, with all other kinds of tempestuous weather; and out at sea, a storm may be lulled by a woman uncovering her body merely, even though not menstruating at the time. As to the menstrual discharge itself, a thing that in other respects, as[35] already stated on a more appropriate occasion, is productive of the most monstrous effects, there are some ravings about it of a most dreadful and unutterable nature. Of these particulars, however, I do not feel so much shocked at mentioning the following. If the menstrual discharge coincides with an eclipse of the moon or sun, the evils resulting from it are irremediable; and no less so, when it happens while the moon is in conjunction with the sun; the congress with a woman at such a period being noxious, and attended with fatal effects to the man. At this period also, the lustre of purple is tarnished by the touch of a woman: so much more baneful is her influence at this time than at any other. At any other time, also, if a woman strips herself naked while she is menstruating, and walks round a field of wheat, the caterpillars, worms, beetles, and other vermin, will fall from off the ears of corn. Metrodorus of Scepsos tells us that this discovery was first made in Cappadocia; and that, in consequence of such multitudes of can-

[33] "Fascia." Either a stomacher, or a fillet for the head.

[34] The mention of lightning here, Hardouin seems to look upon as an interpolation.

[35] In B. vii. c. 13.

tharides being found to breed there, it is the practice for women to walk through the middle of the fields with their garments tucked up above the thighs.[36] In other places, again, it is the usage for women to go barefoot, with the hair dishevelled and the girdle loose: due precaution must be taken, however, that this is not done at sun-rise, for if so, the crop will wither and dry up. Young vines, too, it is said, are injured irremediably by the touch of a woman in this state; and both rue and ivy, plants possessed of highly medicinal virtues, will die instantly upon being touched by her.

Much as I have already stated on the virulent effects of this discharge, I have to state, in addition, that bees, it is a well-known fact, will forsake their hives if touched by a menstruous woman; that linen boiling in the cauldron will turn black, that the edge of a razor will become blunted, and that copper vessels will contract a fetid smell and become covered with verdigrease, on coming in contact with her. A mare big with foal, if touched by a woman in this state, will be sure to miscarry; nay, even more than this, at the very sight of a woman, though seen at a distance even, should she happen to be menstruating for the first time after the loss of her virginity, or for the first time, while in a state of virginity. The bitumen[37] that is found in Judæa, will yield to nothing but the menstrual discharge; its tenacity being overcome, as already stated, by the agency of a thread from a garment which has been brought in contact with this fluid. Fire itself even, an element which triumphs over every other substance, is unable to conquer this; for if reduced to ashes and then sprinkled upon garments when about to be scoured, it will change their purple tint, and tarnish the brightness of the colours. Indeed so pernicious are its properties, that women themselves, the source from which it is derived, are far from being proof against its effects; a pregnant woman, for instance, if touched with it, or indeed if she so much as steps over it, will be liable to miscarry.

Laïs and Elephantis[38] have given statements quite at variance, on the subject of abortives; they mention the efficacy

[36] Columella describes this practice in verse, in B. x., and in B. xi. c. 3. Ælian also mentions it.

[37] See B. vii. c. 13. Tacitus tells the same wonderful story.

[38] See the end of this Book.

for that purpose of charcoal of cabbage root, myrtle root, or tamarisk root, quenched in the menstrual discharge; they say that she-asses will be barren for as many years as they have eaten barley-corns steeped in this fluid; and they have enumerated various other monstrous and irreconcileable properties, the one telling us, for instance, that fruitfulness may be ensured by the very same methods, which, according to the statement of the other, are productive of barrenness; to all which stories it is the best plan to refuse credit altogether. Bithus of Dyrrhachium informs us that a mirror,[39] which has been tarnished by the gaze of a menstruous female, will recover its brightness if the same woman looks steadily upon the back of it; he states, also, that all evil influences of this nature will be entirely neutralized, if the woman carries the fish known as the sur mullet about her person.

On the other hand, again, many writers say that, baneful as it is, there are certain remedial properties in this fluid; that it is a good plan, for instance, to use it as a topical application for gout, and that women, while menstruating, can give relief by touching scrofulous sores and imposthumes of the parotid glands, inflamed tumours, erysipelas, boils, and defluxions of the eyes. According to Laïs and Salpe, the bite of a mad dog, as well as tertian or quartan fevers, may be cured by putting some menstruous blood in the wool of a black ram and enclosing it in a silver bracelet; and we learn from Diotimus of Thebes that the smallest portion will suffice of any kind of cloth that has been stained therewith, a thread even, if inserted and worn in a bracelet. The midwife Sotira informs us that the most efficient cure for tertian and quartan fevers is to rub the soles of the patient's feet therewith, the result being still more successful if the operation is performed by the woman herself, without the patient being aware of it; she says, too, that this is an excellent method for reviving persons when attacked with epilepsy.

Icetidas the physician pledges his word that quartan fever may be cured by sexual intercourse, provided the woman is just beginning to menstruate. It is universally agreed, too, that when a person has been bitten by a dog and manifests a dread of water and of all kinds of drink, it will be quite sufficient to put under his cup a strip of cloth that has been dipped in

[39] See B. vii. c. 13.

this fluid; the result being that the hydrophobia will immediately disappear. This arises, no doubt, from that powerful sympathy which has been so much spoken of by the Greeks, and the existence of which is proved by the fact,[40] already mentioned, that dogs become mad upon tasting this fluid. It is a well-known fact, too, that the menstruous discharge, reduced to ashes, and applied with furnace soot and wax, is a cure for ulcers upon all kinds of beasts of burden; and that stains made upon a garment with it can only be removed by the agency of the urine of the same female. Equally certain it is, too, that this fluid, reduced to ashes and mixed with oil of roses, is very useful, applied to the forehead, for allaying head-ache, in women more particularly; as also that the nature of the discharge is most virulent in females whose virginity has been destroyed solely by the lapse of time.

Another thing universally acknowledged and one which I am ready to believe with the greatest pleasure, is the fact, that if the door-posts are only touched with the menstruous fluid all spells of the magicians will be neutralized—a set of men the most lying in existence, as any one may ascertain. I will give an example of one of the most reasonable of their prescriptions—Take the parings of the toe-nails and finger-nails of a sick person, and mix them up with wax, the party saying that he is seeking a remedy for a tertian, quartan, or quotidian fever, as the case may be; then stick this wax, before sunrise, upon the door of another person—such is the prescription they give for these diseases! What deceitful persons they must be if there is no truth in it! And how highly criminal, if they really do thus transfer diseases from one person to another! Some of them, again, whose practices are of a less guilty nature, recommend that the parings of all the finger-nails should be thrown at the entrance of ant-holes, the first ant to be taken which attempts to draw one into the hole; this, they say, must be attached to the neck of the patient, and he will experience a speedy cure.

### CHAP. 24. (8.)—REMEDIES DERIVED FROM FOREIGN ANIMALS: THE ELEPHANT, EIGHT REMEDIES.

Such then are the remedies from human beings which may with any degree of propriety be described, and many of those only with the leave and good-will of the reader. The rest are

[40] See B. vii. c. 13.

of a most execrable and infamous nature, such, in fact, as to make me hasten to close my description of the remedies derived from man: we will therefore proceed to speak of the more remarkable animals, and the effects produced by them. The blood of the elephant, the male in particular, arrests all those defluxions known by the name of "rheumatismi." Ivory shavings, it is said, in combination with Attic honey, are good for the removal of spots upon the face: with the sawdust, too, of ivory, hangnails are removed. By the touch of an elephant's trunk head-ache is alleviated, if the animal happens to sneeze at the time more particularly. The right side of the trunk, attached to the body with red earth of Lemnos, acts powerfully as an aphrodisiac. Elephant's blood is good for consumption, and the liver for epilepsy.

CHAP. 25.—TEN REMEDIES DERIVED FROM THE LION.

Lion's fat, mixed with oil of roses, protects the skin of the face from all kinds of spots, and preserves the whiteness of the complexion; it is remedial also for such parts of the body as have been frozen by snow, and for swellings in the joints. The frivolous lies of the magicians assert that persons who are anointed with lion's fat, will more readily win favour with kings and peoples; more particularly when the fat has been used that lies between the eyebrows of the animal—a place, in fact, where there is no fat to be found! The like effects they promise also from the possession of a lion's tooth, one from the right side in particular, as also the shaggy hairs that are found upon the lower jaw. The gall, used as an ointment in combination with water, improves the eyesight, and, employed with the fat of the same animal, is a cure for epilepsy; but a slight taste only must be taken of it, and the patient must run immediately after swallowing it, in order to digest it. A lion's heart, used as food, is curative of quartan fevers, and the fat, taken with oil of roses, of quotidian fevers. Wild beasts will fly from persons anointed with lion's fat, and it is thought to be a preservative even against treacherous practices.

CHAP. 26.—TEN REMEDIES DERIVED FROM THE CAMEL.

A camel's[41] brains, dried and taken in vinegar, are a cure, they

[41] Pliny has omitted the milk of the camel, which, according to Tavernier, is an excellent cure for dropsy.

say, for epilepsy: the same, too, with the gall, taken with honey; which is a remedy also for quinzy. A camel's tail dried, it is said, is productive of diarrhœa, and ashes of burnt camel's dung, mixed with oil, make the hair curl. These ashes, applied topically, are very useful for dysentery, as also taken in drink, the proper dose being a pinch in three fingers at a time; they are curative also of epilepsy. Camel's urine it is said, is very useful to fullers, and is good for the cure of running sores. Barbarous nations, we are told, are in the habit of keeping it till it is five years old, and then taking it as a purgative, in doses of one semisextarius. The hairs of the tail, it is said, plaited and attached to the left arm, are a cure for quartan fevers.

### CHAP. 27.—SEVENTY-NINE REMEDIES DERIVED FROM THE HYÆNA.

But of all animals, it is the hyæna that has been held in the highest admiration by the magicians, who have gone so far as to attribute to it certain magical virtues even, and the power of alluring[42] human beings and depriving them of their senses. Of its change of sex each year, and other monstrous peculiarities[43] in its nature, we have spoken already;[44] we will now proceed to describe the medicinal virtues that are ascribed to it.

The hyæna, it is said, is particularly terrible to panthers; so much so, indeed, that they will not attempt to make the slightest resistance to it, and will never attack a man who has any portion of a hyæna's skin about him. A thing truly marvellous to tell of, if the hides of these two animals are hung up facing one another, the hair will fall from off the panther's skin! When the hyæna flies before the hunter, it turns off on the right, and letting the man get before it, follows in his track; should it succeed in doing which, the man is sure to lose his senses and fall from his horse even. But if, on the other hand, it turns off to the left, it is a sign that the animal is losing strength, and that it will soon be taken. The easiest method, however, of taking it, they say, is for the hunter to tie his girdle with seven knots, and to make as many knots in the

[42] See B. viii. c. 44.

[43] One peculiarity not mentioned by Pliny, is, that its skin, like that of the sea-calf, was said to be proof against the effects of lightning.

[44] In B. viii. c. 44.

whip with which he guides his horse. In addition to all this, so full of quirks and subtleties are the vain conceits of the magicians, they recommend the hyæna to be captured while the moon is passing through the sign of Gemini, and every hair of it to be preserved, if possible. They say, too, that the skin of the head is highly efficacious, if attached to a person suffering from head-ache; that the gall, applied to the forehead, is curative of ophthalmia; and that if the gall is boiled down with three cyathi of Attic honey and one ounce of saffron, it will be a most effectual preservative against that disease, the same preparation being equally good for the dispersion of films on the eyes and cataract. If, again, this preparation is kept till it is old, it will be all the better for improving the sight, due care being taken to preserve it in a box of Cyprian copper: they assert also, that it is good for the cure of argema, eruptions and excrescences of the eyes, and marks upon those organs. For diseases[45] of the crystalline humours of the eyes, it is recommended to anoint them with the gravy of hyæna's liver roasted fresh, incorporated with clarified honey.

We learn also, from the same sources, that the teeth of the hyæna are useful for the cure of tooth-ache, the diseased tooth being either touched with them, or the animal's teeth being arranged in their regular order, and attached to the patient; that the shoulders of this animal are good for the cure of pains in the arms and shoulders; that the teeth, extracted from the left side of the jaw, and wrapped in the skin of a sheep or he-goat, are an effectual cure for pains in the stomach; that the lights of the animal, taken with the food, are good for cœliac affections; that the lights, reduced to ashes and applied with oil, are also soothing to the stomach; that the marrow of the back-bone, used with old oil and gall, is strengthening to the sinews; that the liver, tasted thrice just before the paroxysms, is good for quartan fevers; that the ashes of the vertebræ, applied in hyæna's skin with the tongue and right foot of a sea-calf and a bull's gall, the whole boiled up together, are soothing for gout; that for the same disease hyæna's gall is advantageously employed in combination with stone of Assos;[46] that for cold shiverings, spasms, sudden fits of starting, and palpitations of the

[45] "Glaucomata." Littré considers, on the authority of M. Sichel, that "Glaucoma" and "suffusio" are different names for the same disease—cataract.

[46] See B. xxxvi. c. 27.

heart, it is a good plan to eat some portion of a hyæna's heart cooked, care being taken to reduce the rest to ashes, and to apply it with the brains of the animal to the part affected; that this last composition, or the gall applied alone, acts as a depilatory, the hairs being first plucked out which are wanted not to grow again; that by this method superfluous hairs of the eyelids may be removed; that the flesh of the loins, eaten and applied with oil, is a cure for pains in the loins; and that sterility in females may be removed by giving them the eye of this animal to eat, in combination with liquorice and dill, conception within three days being warranted as the result.

Persons afflicted with night-mare and dread of spectres, will experience relief, they say, by attaching one of the large teeth of a hyæna to the body, with a linen thread. In fits of delirium too, it is recommended to fumigate the patient with the smoke of one of these teeth, and to attach one in front of his chest, with the fat of the kidneys, or else the liver or skin. They assert also that a pregnant woman will never miscarry, if she wears suspended from her neck, the white flesh from a hyæna's breast, with seven hairs and the genitals of a stag, the whole tied up in the skin of a gazelle. The genitals, they say, eaten with honey, act as a stimulant upon a person, according to the sex, and this even though it should be the case of a man who has manifested an aversion to all intercourse with females.

Nay, even more than all this, we are assured that if the genitals and a certain joint of the vertebræ are preserved in a house with the hide adhering to them, they will ensure peace and concord between all members of the family; hence it is that this part is known as the "joint of the spine,"[47] or "Atlantian[48] knot." This joint, which is the first, is reckoned among the remedies for epilepsy.

The fumes of the burnt fat of this animal will put serpents to flight, they say; and the jawbone, pounded with anise and taken with the food, is a cure for shivering fits. A fumigation made therewith has the effect of an emmenagogue; and such are the frivolous and absurd conceits of the professors of the magic art, that they boldly assert that if a man attaches to

[47] "Spinæ" seems a preferable reading to "ruinæ," adopted by Sillig.

[48] "Nodum Atlantion." From the Greek ἄτλας, "much enduring," Julius Pollux says, because it was fitted for supporting burdens. The "hinc"—"hence," of Pliny here appears to be a *non sequitur*.

his arm a tooth from the right side of the upper jaw, he will never miss any object he may happen to aim at with a dart. The palate, dried and warmed with Egyptian alum,[49] is curative of bad odours and ulcers of the mouth, care being taken to renew the application three times. Dogs, they say, will never bark at persons who have a hyæna's tongue in the shoe, beneath the sole of the foot. The left side of the brain, applied to the nostrils, is said to have a soothing effect upon all dangerous maladies either in men or beasts. They say, too, that the skin of the forehead is a preservative against all fascinations; that the flesh of the neck, whether eaten or dried and taken in drink, is good for pains in the loins; that the sinews of the back and shoulders, used as a fumigation, are good for pains in the sinews; that the bristles of the snout, applied to a woman's lips, have all the effect of a philtre; and that the liver, administered in drink, is curative of griping pains and urinary calculi.

The heart, it is said, taken with the food or drink, is remedial for all kinds of pains in the body; the milt for pains in the spleen; the caul, in combination with oil, for inflammatory ulcers; and the marrow for pains in the spine and weakness in the sinews. The strings of the kidneys, they say, if taken with wine and frankincense, will restore fruitfulness, in cases where it has been banished through the agency of noxious spells; the uterus, taken in drink with the rind of a sweet pomegranate, is highly beneficial for diseases of the uterus; and the fat of the loins, used as a fumigation, removes all impediments to delivery, and accelerates parturition. The marrow of the back, attached to the body as an amulet, is an effectual remedy for fantastic illusions,[50] and the genitals of the male animal, used as a fumigation, are good for the cure of spasms. For ophthalmia, ruptures, and inflammations, the feet, which are kept for the purpose, are touched; the left feet for affections on the right side of the body, and the right feet for affections on the left. The left foot, if laid upon the body of a woman in travail, will be productive, they say, of fatal effects; but the right foot, similarly employed, will facilitate delivery. The vesicle which has contained the gall, taken in wine or with the food, is

[49] We shall have occasion to make enquiry as to the identity of the "alumen" of Pliny on a future occasion.

[50] "Vanas species."

beneficial for the cardiac disease; and the bladder, taken in wine, is a good preservative against incontinence of urine. The urine, too, which is found in the bladder, taken with oil, sesame, and honey, is said to be useful for diseases of long standing.

The first rib and the eighth, used as a fumigation, are said to be useful for ruptures; the vertebræ for women in travail; and the blood, in combination with polenta,[51] for griping pains in the bowels. If the door-posts are touched with this blood, the various arts of the magicians will be rendered of no effect; they will neither be able to summon the gods into their presence nor to converse with them, whatever the method to which they have recourse, whether lamps or basin, water or globe,[52] or any other method.

The flesh of the hyæna, taken as food, is said to be efficacious for the bite of a mad dog, and the liver still more so. The flesh or bones of a human being which have been found in the belly of a slain hyæna, used as a fumigation, are said to be remedial for gout: but if among these remains the nails are found, it is looked upon as a presage of death to some one among those who have captured it. The excrements or bones which have been voided by the animal at the moment when killed, are looked upon as counter-charms to magic spells. The dung found in the intestines is dried and administered in drink for dysentery; and it is applied to all parts of the body with goose-grease, in the form of a liniment, in the case of persons who have received injury from some noxious medicament. By rubbing themselves with the grease, and lying upon the skin, of a hyæna, persons who have been bitten by dogs are cured.

On the other hand, the ashes of the left pastern-bone, they say, boiled with weasel's blood, and applied to a person's body, will ensure universal hatred; a similar effect being equally produced by the eye when boiled. But the most extraordinary thing of all is, their assertion that the extremity of the rectum of this animal is a preservative against all oppression on the part of chiefs and potentates, and an assurance of success in all petitions, judgments, and lawsuits, and this, if a person only carries it about him. The anus, according to them, has so powerful an effect as a philtre, that if it is worn on the left arm, a woman will be sure to follow the wearer the moment

[51] See B. xviii. c. 14. [52] "Pila."

he looks at her. The hairs, too, of this part, reduced to ashes, and applied with oil to the body of a man who is living a life of disgraceful effeminacy, will render him not only modest, they assure us, but of scrupulous morals even.

CHAP. 28.—NINETEEN REMEDIES DERIVED FROM THE CROCODILE.

For fabulous stories connected with it the crocodile may challenge the next place; and, indeed for cunning, the one[53] which lives both upon land and in the water is fully its equal: for I would here remark, that there are two varieties of this animal. The teeth of the right jaw of the amphibious crocodile, attached to the right arm as an amulet, acts as an aphrodisiac, that is, if we choose to believe it. The eye-teeth of the animal, filled with frankincense—for they are hollow—are a cure for periodical fevers, care being taken to let the patient remain five days without seeing the person who has attached them to his body. A similar virtue is attributed to the small stones which are found in the belly of this animal, as being a check to the cold shiverings in fevers, when about to come on; and with the same object the Ægyptians are in the habit of anointing their sick with the fat of the crocodile.

The other kind of crocodile[54] resembles it, but is much inferior in size: it lives upon land only, and among the most odoriferous flowers; hence it is that its intestines are so greatly in request, being filled as they are with a mass of agreeable perfumes. This substance is called "crocodilea," and it is looked upon as extremely beneficial for diseases of the eyes, and for the treatment of films and cataract, being applied with leek-juice in the form of an ointment. Applied with oil of cyprus,[55] it removes blemishes growing upon the face; and, employed with water, it is a cure for all those diseases, the nature of which it is to spread upon the face, while at the same time it restores the natural tints of the skin. An application of it makes freckles disappear, as well as all kinds of spots and

[53] Identified by Ajasson with the *chamses*, or common crocodile of the Nile.

[54] See B. viii. c. 38. Identified by Ajasson with the *souchos* of Geoffroy Saint-Hilaire. It is equally amphibious with the other; and the account of its habits given by Pliny is probably founded on the fact that Upper Egypt, which it inhabits, is covered with a more aromatic vegetation than the other parts of that country.

[55] See B. xii. c. 51.

pimples; and it is taken for epilepsy, in doses of two oboli, in oxymel. Used in the form of a pessary it acts as an emmenagogue. The best kind of crocodilea, is that which is the whitest, friable, and the lightest in weight: when rubbed between the fingers it should ferment like leaven. The usual method is to wash it, as they do white lead. It is sometimes adulterated with amylum[56] or with Cimolian earth, but the most common method of sophistication is to catch the crocodiles and feed them upon nothing but rice. It is recommended as one of the most efficient remedies for cataract to anoint the eyes with crocodile's gall, incorporated with honey. We are assured also that it is highly beneficial for affections of the uterus to make fumigations with the intestines and rest of the body, or else to envelope the patient with wool impregnated with the smoke.

The ashes of the skin of either crocodile, applied with vinegar to such parts of the body as are about to undergo an incision, or indeed the very smell of the skin when burning, will render the patient insensible to the knife. The blood of either crocodile, applied to the eyes, effaces marks upon those organs and improves the sight. The body, with the exception of the head and feet, is eaten, boiled, for the cure of sciatica, and is found very useful for chronic coughs, in children more particularly: it is equally good, too, for the cure of lumbago. These animals have a certain fat also, which, applied to the hair, makes it fall off; persons anointed with this fat are effectually protected against crocodiles, and it is the practice to drop it into wounds inflicted by them. A crocodile's heart, attached to the body in the wool of a black sheep without a speck of any other colour, due care too being taken that the sheep was the first lamb yeaned by its dam, will effectually cure a quartan fever, it is said.

### CHAP. 29.—FIFTEEN REMEDIES DERIVED FROM THE CHAMÆLEON.

To these animals we shall annex some others that are equally foreign, and very similar in their properties. To begin then with the chamæleon, which Democritus has considered worthy to be made the subject of an especial work, and each part of which has been consecrated to some particular purpose—This book, in fact, has afforded me no small amusement, revealing

[56] See B. xviii. c. 17.

as it does, and exposing the lies and frivolities of the Greeks.—In size, the chamæleon resembles the crocodile last mentioned, and only differs from it in having the back-bone arched at a more acute angle, and a larger tail. There is no animal, it is thought, more[57] timid than this, a fact to which it owes its repeated changes of colour.[58] It has a peculiar ascendancy over the hawk tribe; for, according to report, it has the power of attracting those birds, when flying above it, and then leaving them a voluntary prey for other animals. Democritus[59] asserts that if the head and neck of a chamæleon are burnt in a fire made with logs of oak, it will be productive of a storm attended with rain and thunder; a result equally produced by burning the liver upon the tiles of a house. As to the rest of the magical virtues which he ascribes to this animal, we shall forbear to mention them, although we look upon them as unfounded;[60] except, indeed, in some few instances where their very ridiculousness sufficiently refutes his assertions.

The right eye, he says, taken from the living animal and applied with goats' milk, removes diseases of the crystalline humours of the eyes; and the tongue, attached to the body as an amulet, is an effectual preservative against the perils of child-birth. He asserts also that the animal itself will facilitate parturition, if in the house at the moment; but if, on the other hand, it is brought from elsewhere, the consequences, he says, will be most dangerous. The tongue, he tells us, if taken from the animal alive, will ensure a favourable result to suits at law; and the heart, attached to the body with black wool of the first shearing, is a good preservative against the attacks of quartan fever.

He states also that the right fore-paw, attached to the left arm in the skin of the hyæna, is a most effectual preservative against robberies and alarms at night; that the pap on the right side is a preventive of fright and panics; that the left foot is sometimes burnt in a furnace with the plant which also has the name of "chamæleon,"[61] and is then made up, with some unguent, into lozenges; and that these lozenges, kept in

[57] It is a timid animal, but Pliny's authorities have exaggerated its timidity.

[58] This change of colour is in reality owing to change of locality.

[59] A. Gellius tells the same story, B. x. c. 12.

[60] And therefore harmless.

[61] See B. xxii. c. 21.

a wooden vessel, have the effect, if we choose to believe him, of making their owner invisible to others; that the possession, also, of the right shoulder of this animal will ensure victory over all adversaries or enemies, provided always the party throws the sinews of the shoulder upon the ground and treads them under foot. As to the left shoulder of the chamæleon, I should be quite ashamed to say to what monstrous purposes Democritus devotes it; how that dreams may be produced by the agency thereof, and transferred to any person we may think proper; how that these dreams may be dispelled by the employment of the right foot; and how that lethargy, which has been produced by the right foot of this animal, may be removed by the agency of the left side.

So, too, head-ache, he tells us, may be cured by sprinkling wine upon the head, in which either flank of a chamæleon has been macerated. If the feet are rubbed with the ashes of the left thigh or foot, mixed with sow's milk, gout, he says, will be the result. It is pretty generally believed, however, that cataract and diseases of the crystalline humours of the eyes may be cured by anointing those organs with the gall for three consecutive days; that serpents may be put to flight by dropping some of it into the fire; that weasels may be attracted by water into which it has been thrown; and that, applied to the body, it acts as a depilatory. The liver, they say, applied with the lungs of a bramble-frog, is productive of a similar effect: in addition to which, we are told that the liver counteracts the effects of philtres; that persons are cured of melancholy by drinking from the warm skin of a chamæleon the juice of the plant known by that name; and that if the intestines of the animal and their contents—we should bear in mind that in reality the animal lives without food[62]—are mixed with apes' urine, and the doors of an enemy are besmeared with the mixture, he will, through its agency, become the object of universal hatred.

We are told, too, that by the agency of the tail, the course of rivers and torrents may be stopped, and serpents struck with torpor; that the tail, prepared with cedar and myrrh, and tied to a double branch of the date-palm, will divide waters that are smitten therewith, and so disclose every-

[62] See B. viii. c. 51. Flies and gnats are, in reality, its food.

thing that lies at the bottom—and I only wish[63] that Democritus himself had been touched up with this branch of palm, seeing that, as he tells us, it has the property of putting an end to immoderate garrulity. It is quite evident that this philosopher, a man who has shown himself so sagacious in other respects, and so useful to his fellow-men, has been led away, in this instance, by too earnest a desire to promote the welfare of mankind.

CHAP. 30.—FOUR REMEDIES DERIVED FROM THE SCINCUS.

Similar in appearance to the preceding animals is the scincus,[64] which by some writers has been called the land crocodile; it is, however, whiter in appearance, and the skin is not so thick. But the main difference between it and the crocodile is in the arrangement of the scales, which run from the tail towards the head. The largest of these animals is the Indian scincus, and next to it that of Arabia; they are brought here salted. The muzzle and fat of the scincus, taken in white wine, act as an aphrodisiac; when used with satyrion[65] and rocket-seed more particularly, in the proportion of one drachma of each, mixed with two drachmæ of pepper; the whole being made up into lozenges of one drachma each, and so taken in drink. The flesh from the flanks, taken internally in a similar manner, in doses of two oboli, with myrrh and pepper, is generally thought to be productive of a similar effect, and to be even more efficacious for the purpose. According to Apelles, the flesh of the scincus is good for wounds inflicted by poisoned arrows, whether taken before or after the wound is inflicted: it is used as an ingredient, also, in the most celebrated antidotes. Sextius tells us, that, taken in doses of more than one drachma, in one semisextarius of wine, the flesh is productive of deadly results: he adds, too, that a broth prepared from it, taken with honey, acts as an antaphrodisiac.

CHAP. 31.—SEVEN REMEDIES DERIVED FROM THE HIPPOPOTAMUS.

Between the crocodile, too, and the hippopotamus there is a certain affinity, frequenting as they do the same river, and being both of them of an amphibious nature. The hippopo-

[63] One of the few pieces of wit in which Pliny is found to indulge.
[64] See B. viii. c. 38. Probably the Lacerta ouaran of Cuvier.
[65] See B. xxvi. c. 62.

tamus was the first inventor of the practice of letting blood, a fact to which we have[66] made allusion on a previous occasion: it is found, too, in the greatest numbers in the parts above the præfecture of Saïs.

The hide, reduced to ashes and applied with water, is curative of inflamed tumours, and the fat, as well as the dung, used as a fumigation, is employed for the cure of cold agues. With the teeth of the left side of the jaw, the gums are scarified for the cure of tooth-ache. The skin of the left side of the forehead, attached to the groin, acts as an antaphrodisiac; and an application of the ashes of the same part will cause the hair to grow when lost through alopecy. The testes are taken in water, in doses of one drachma, for the cure of injuries inflicted by serpents. The blood is made use of by painters.

### CHAP. 32.—FIVE REMEDIES DERIVED FROM THE LYNX.

To foreign countries, also, belongs the lynx, which of all quadrupeds is possessed of the most piercing sight. It is said that in the Isle of Carpathus a most powerful medicament is obtained by reducing to ashes the nails of the lynx, together with the hide; that these ashes, taken in drink, have the effect of checking abominable desires in men; and that, if they are sprinkled upon women, all libidinous thoughts will be restrained. They are good too for the removal of itching sensations in any part of the body. The urine of the lynx is a remedy for strangury; for which reason the animal, it is said, is in the habit of rooting up the ground and covering it the moment it is voided.[67] It is mentioned, too, that this urine is an effectual remedy for pains in the throat. Thus much with reference to foreign animals.

### CHAP. 33. (9.)—REMEDIES FURNISHED IN COMMON BY ANIMALS OF THE SAME CLASS, WHETHER WILD OR TAME. FIFTY-FOUR MEDICINAL USES OF MILK, WITH OBSERVATIONS THEREON.

We will now return to our own part of the world, speaking, first of all, of certain remedies common to animals in general, but excellent in their nature; such as the use of milk, for example. The most beneficial milk to every creature is the mother's[68] milk. It is highly dangerous for nursing women to

[66] In B. viii. c. 40.
[67] See B. viii. c. 57.
[68] Except, of course, when the mother is in a state of disease.

conceive: children that are suckled by them are known among us as "colostrati,"[69] their milk being thick, like cheese in appearance—the name "colostra,"[70] it should be remembered, is given to the first milk secreted after delivery, which assumes a spongy, coagulated form. The most nutritive milk, in all cases, is woman's milk, and next to that goats' milk, to which is owing, probably, the fabulous story that Jupiter was suckled by a goat.[71] The sweetest, next to woman's milk, is camels' milk; but the most efficacious, medicinally speaking, is asses' milk. It is in animals of the largest size and individuals of the greatest bulk, that the milk is secreted with the greatest facility. Goats' milk agrees the best with the stomach, that animal browsing more than grazing. Cows' milk is considered more medicinal, while ewes' milk is sweeter and more nutritive, but not so well adapted to the stomach, it being more oleaginous than any other.

Every kind of milk is more aqueous in spring than in summer, and the same in all cases where the animal has grazed upon a new pasture. The best milk of all is that which adheres to the finger nail, when placed there, and does not run from off it. Milk is most harmless when boiled, more particularly if sea pebbles[72] have been boiled with it. Cows' milk is the most relaxing, and all kinds of milk are less apt to inflate when boiled. Milk is used for all kinds of internal ulcerations, those of the kidneys, bladder, intestines, throat, and lungs in particular; and externally, it is employed for itching sensations upon the skin, and for purulent eruptions, it being taken fasting for the purpose. We have already[73] stated, when speaking of the plants, how that in Arcadia cows' milk is administered for phthisis, consumption, and cachexy. Instances are cited, also, of persons who have been cured of gout in the hands and feet, by drinking asses' milk.

To these various kinds of milk, medical men have added another, to which they have given the name of "schiston;"[74]

[69] See B. xi. c. 96. Dalechamps remarks that Pliny is in error here: this name being properly given to infants which have been put to the breast too soon after child-birth. And so it would appear from the context.

[70] The "biestings."

[71] Amalthæa.

[72] Dioscorides says "river pebbles."

[73] In B. xxv. c. 53.

[74] From the Greek σχιστὸν, "divided" milk, or "curds."

the following being the usual method of preparing it. Goats' milk, which is used in preference for the purpose, is boiled in a new earthen vessel, and stirred with branches of a fig-tree newly gathered, as many cyathi of honied wine being added to it as there are semisextarii of milk. When the mixture boils, care is taken to prevent it running over, by plunging into it a silver cyathus measure filled with cold water, none of the water being allowed to escape. When taken off the fire, the constituent parts of it divide as it cools, and the whey is thus separated from the milk. Some persons, again, take this whey, which is now very strongly impregnated with wine, and, after boiling it down to one third, leave it to cool in the open air. The best way of taking it, is in doses of one semisextarius, at stated intervals, during five consecutive days; after taking it, riding exercise should be used by the patient. This whey is administered in cases of epilepsy, melancholy, paralysis, leprosy, elephantiasis, and diseases of the joints.

Milk is employed as an injection where excoriations have been caused by the use of strong purgatives; in cases also where dysentery is productive of chafing, it is similarly employed, boiled with sea pebbles or a ptisan of barley. Where, however, the intestines are excoriated, cows' milk or ewes' milk is the best. New milk is used as an injection for dysentery; and in an unboiled state, it is employed for affections of the colon and uterus, and for injuries inflicted by serpents. It is also taken internally as an antidote to the venom of cantharides, the pine-caterpillar, the buprestis, and the salamander. Cows' milk is particularly recommended for persons who have taken colchicum, hemlock, dorycnium,[75] or the flesh of the sea-hare; and asses' milk, in cases where gypsum, white-lead, sulphur,[76] or quick-silver, have been taken internally. This last is good too for constipation attendant upon fever, and is remarkably useful as a gargle for ulcerations of the throat. It is taken, also, internally, by patients suffering from atrophy, for the purpose of recruiting their exhausted strength; as also in cases of fever unattended with head-ache. The ancients held it as one of their grand secrets, to administer to children, before taking food, a semisextarius of asses' milk, or for want of that, goats' milk; a similar dose, too, was given to children troubled

[75] See B. xxi. c. 105.

[76] He perhaps means a sulphate, and not sulphur, which is harmless.

with chafing of the rectum at stool. It is considered a sovereign remedy for hardness of breathing, to take cows' milk whey, mixed with nasturtium. In cases of ophthalmia, too, the eyes are fomented with a mixture of one semisextarius of milk and four drachmæ of pounded sesame.

Goats' milk is a cure for diseases of the spleen; but in such case the goats must fast a couple of days, and be fed on ivy-leaves the third; the patient, too, must drink the milk for three consecutive days, without taking any other nutriment. Milk, under other circumstances, is detrimental to persons suffering from head-ache, liver complaints, diseases of the spleen, and affections of the sinews; it is bad for fevers, also, vertigo—except, indeed, where it is required as a purgative—oppression of the head, coughs, and ophthalmia. Sows' milk is extremely useful in cases of tenesmus, dysentery, and phthisis; authors have been found too, to assert that it is very wholesome for females.

### CHAP. 34.—TWELVE REMEDIES DERIVED FROM CHEESE.

We have already[77] spoken of the different kinds of cheese when treating of the mamillæ and other parts of animals. Sextius attributes the same properties to mares' milk cheese that he does to cheese made of cows' milk: to the former he gives the names of "hippace." Cheese is best for the stomach when not salted, or, in other words, when new cheese is used. Old [salted] cheese has a binding effect upon the bowels, and reduces the flesh, but is more wholesome to the stomach [than new salted cheese]. Indeed, we may pronounce of aliments in general, that salt meats reduce the system, while fresh food has a tendency to make flesh. Fresh cheese, applied with honey, effaces the marks of bruises. It acts, also, emolliently upon the bowels; and, taken in the form of tablets, boiled in astringent wine and then toasted with honey on a platter, it modifies and alleviates griping pains in the bowels.

The cheese known as "saprum,"[78] is beaten up, in wine, with salt and dried sorb apples, and taken in drink, for the cure of cœliac affections. Goats' milk cheese, pounded and applied to the part affected, is a cure for carbuncle of the generative organs; sour cheese, also, with oxymel, is productive of a similar effect. In the bath it is used as a friction, alternately with oil, for the removal of spots.

[77] In B. xi. c. 97. [78] From the Greek σαπρὸν, "rotten" cheese.
[79] Like our cream cheese, or new milk cheese, probably.

CHAP. 35.—TWENTY-FIVE REMEDIES DERIVED FROM BUTTER.

From milk, too, butter is produced; held as the most delicate of food among barbarous[80] nations, and one which distinguishes[81] the wealthy from the multitude at large. It is mostly made from cows' milk, and hence its name;[82] but the richest butter is that made from ewes' milk. There is a butter made also from goats' milk; but previously to making it, the milk should first be warmed, in winter. In summer it is extracted from the milk by merely shaking it to and fro in a tall vessel, with a small orifice at the mouth to admit the air, but otherwise closely stopped, a little water[83] being added to make it curdle the sooner. The milk that curdles the most, floats upon the surface; this they remove, and, adding salt to it, give it the name of "oxygala."[84] They then take the remaining part and boil it down in pots, and that portion of it which floats on the surface is butter, a substance of an oily nature. The more[85] rank it is in smell, the more highly it is esteemed. When old, it forms an ingredient in numerous compositions. It is of an astringent, emollient, repletive, and purgative nature.

[80] The people of Germany and Scythia, for instance.

[81] In this passage also it is generally supposed that he refers to the nomadic life of barbarous nations, in which multitudes of sheep and cattle constituted the chief wealth. It is, however, not improbable that he means to say that among the Romans it was only the wealthy who could afford to use it.

[82] Βούτυρον, "cow cheese."

[83] Qy. whether for "aquæ," "water," we should not read "acidi" here, "sour milk," as at the beginning of the next Chapter? Beckmann suggests "aceti," "vinegar."—*Hist. Inv.* I. 505, *Bohn's Ed.*

[84] Beckmann says on this passage, "What Pliny says respecting *oxygala* is attended with difficulties: and I am fully persuaded that his words are corrupted, though I find no variations marked in MSS. by which this conjecture can be supported."—*Hist. Inv.* I. 505. He suggests another arrangement of the whole passage, but without improving it, for the difficulty would appear to be totally imaginary; as it is quite clear that by "oxygala," or "sour milk," Pliny means the thickest part of the curd, which is first removed and then salted, forming probably a sort of cream cheese. Though his meaning is clear, he may very possibly give an erroneous description of the process.

[85] The remark of Holland on this passage is curious—"Some would amend this place, and for 'magis,' 'more,' put 'minus,' 'less,' in a contrary sense; but I suppose he writeth in regard of barbarous people, who make more account of such ranke butyr; like as the uncivile Irish in these daies."

CHAP. 36.—OXYGALA: ONE REMEDY.

Oxygala, too, is prepared another way, sour milk being added to the fresh milk which is wanted to curdle. This preparation is extremely wholesome to the stomach: of its properties we shall have occasion[86] to speak in another place.

CHAP. 37.—THE VARIOUS USES OF FAT AND OBSERVATIONS UPON IT, FIFTY-TWO IN NUMBER.

Among the remedies common to living creatures, fat is the substance held in the next highest esteem, that of swine in particular, which was employed by the ancients for certain religious purposes even: at all events, it is still the usage for the newly-wedded bride, when entering her husband's house, to touch the door-posts with it. There are two methods of keeping hogs' lard, either salted or fresh; indeed, the older it is, the better. The Greek writers have now given it the name of "axungia,"[87] or axle-grease, in their works. Nor, in fact, is it any secret, why swine's fat should be possessed of such marked properties, seeing that the animal feeds to such a great extent upon the roots of plants—owing too, to which, its dung is applied to such a vast number of purposes. It will be as well, therefore, to premise, that I shall here speak only of the hog that feeds in the open field, and no other; of which kind it is the female that is much the most useful—if she has never farrowed, more particularly. But it is the fat of the wild boar that is held in by far the highest esteem of all.

The distinguishing properties, then, of swine's-grease, are emollient, calorific, resolvent, and detergent. Some physicians recommend it as an ointment for the gout, mixed with goose-grease, bull-suet, and wool-grease: in cases, however, where the pain is persistent, it should be used in combination with wax, myrtle, resin, and pitch. Hogs' lard is used fresh for the cure of burns, and of blains, too, caused by snow: with ashes of burnt barley and nutgalls, in equal proportions, it is employed for the cure of chilblains. It is good also for excoriations of the limbs, and for dispelling weariness and lassitude arising from long journeys. For the cure of chronic cough, new lard is boiled down, in the proportion of three ounces to three

[86] He has forgotten to do so, however.

[87] From the Latin "axis," an "axle," and "ungo," "to anoint."

cyathi of wine, some honey being added to the mixture. Old lard too, if it has been kept without salt, made up into pills and taken internally, is a cure for phthisis: but it is a general rule not to use it salted in any cases except where detergents are required, or where there are no symptoms of ulceration. For the cure of phthisis, some persons boil down three ounces of hogs' lard and honied wine, in three cyathi of ordinary wine; and after swathing the sides, chest, and shoulders of the patient with compresses steeped in the preparation, administer to him, every four days, some tar with an egg: indeed, so potent is this composition, that if it is only attached to the knees even, the flavour of it will ascend to the mouth, and the patient will appear to spit it out,[88] as it were.

The grease of a sow that has never farrowed, is the most useful of all cosmetics for the skin of females; but in all cases, hogs' lard is good for the cure of itch-scab, mixed with pitch and beef-suet in the proportion of one-third, the whole being made lukewarm for the purpose. Fresh hogs' lard, applied as a pessary, imparts nutriment to the infant in the womb, and prevents abortion. Mixed with white lead or litharge, it restores scars to their natural colour; and, in combination with sulphur, it rectifies malformed nails. It prevents the hair also from falling off; and, applied with a quarter of a nutgall, it heals ulcers upon the head in females. When well smoked, it strengthens the eyelashes. Lard is recommended also for phthisis, boiled down with old wine, in the proportion of one ounce to a semisextarius, till only three ounces are left; some persons add a little honey to the composition. Mixed with lime, it is used as a liniment for inflamed tumours, boils, and indurations of the mamillæ: it is curative also of ruptures, convulsions, cramps, and sprains. Used with white hellebore, it is good for corns, chaps, and callosities; and, with pounded earthenware[89] which has held salted provisions, for imposthumes of the parotid glands and scrofulous sores. Employed as a friction in the bath, it removes itching sensations and pimples: but for the treatment of gout there is another method of preparing it, by mixing it with old oil, and adding pounded sarcophagus[90] stone and cinquefoil bruised in wine, or else with lime

[88] Hence it was a notion in the sixteenth century, that pitch and hogs' lard is a cure for syphilis, by promoting salivation.

[89] "Farina salsamentariæ testæ."

[90] See B. xxxvi. c. 27.

or ashes. A peculiar kind of plaster is also made of it for the cure of inflammatory ulcers, seventy-five denarii of hogs' lard being mixed with one hundred of litharge.

It is reckoned a very good plan also to anoint ulcers with boars' grease, and, if they are of a serpiginous nature, to add resin to the liniment. The ancients used to employ hogs' lard in particular for greasing the axles of their vehicles, that the wheels might revolve the more easily, and to this, in fact, it owes its name of "axungia." When hogs' lard has been used for this purpose, incorporated as it is with the rust of the iron upon the wheels, it is remarkably useful as an application for diseases of the rectum and of the generative organs. The ancient physicians, too, set a high value upon the medicinal properties of hogs' lard in an unmixed state: separating it from the kidneys, and carefully removing the veins, they used to wash and rub it well in rain water, after which they boiled it several times in a new earthen vessel, and then put it by for keeping. It is generally agreed that it is more emollient, calorific, and resolvent, when salted; and that it is still more useful when it has been rinsed in wine.

Massurius informs us, that the ancients set the highest value of all upon the fat of the wolf: and that it was for this reason that the newly-wedded bride used to anoint the door-posts of her husband's house with it, in order that no noxious spells might find admittance.

### CHAP. 38.—SUET.

Corresponding with the grease of the swine, is the suet[91] that is found in the ruminating animals, a substance employed in other ways, but no less efficacious in its properties. The proper mode of preparing it, in all cases, is to take out the veins and to rinse it in sea or salt-water, after which it is beaten up in a mortar, with a sprinkling of sea-water in it. This done, it is boiled in several waters, until, in fact, it has lost all smell, and is then bleached by continual exposure to the sun; that of the most esteemed quality being the fat which grows about the kidneys. In case stale suet is required for any medicinal purpose, it is recommended to melt it first, and then to wash it in cold water several times; after which, it must again be melted with a sprinkling of the most aromatic wine that can be pro-

[91] "Sebum"—Suet or tallow.

cured, it being then boiled again and again, until the rank smell has totally disappeared.

Many persons recommend that the fat of bulls, lions, panthers, and camels, in particular, should be thus prepared. As to the various uses to which these substances are applied, we shall mention them on the appropriate occasions.

### CHAP. 39.—MARROW.

Common too, to all these animals, is marrow; a substance which in all cases is possessed of certain emollient, expletive, desiccative, and calorific properties. The most highly esteemed of all is deer's marrow, the next best being that of the calf, and then that of the goat, both male and female. These substances are prepared before autumn, by washing them in a fresh state, and drying them in the shade; after which they are passed through a sieve, and then strained through linen, and put by in earthen pots for keeping, in a cool spot.

### CHAP. 40.—GALL.

But among the substances which are furnished in common by the various animals, it is the gall, we may say, that is the most efficacious of all. The properties of this substance are of a calorific, pungent, resolvent, extractive, and dispersive nature. The gall of the smaller animals is looked upon as the most penetrating; for which reason it is that it is generally considered the most efficacious for the composition of eye-salves. Bull's gall is possessed of a remarkable degree of potency, having the effect of imparting a golden tint to the surface of copper even and to vessels made of other metals. Gall in every case is prepared in the following manner: it is taken fresh, and the orifice of the vesicle in which it is contained being tied fast with a strong linen thread, it is left to steep for half an hour in boiling water; after which it is dried in the shade, and then put away for keeping, in honey.

That of the horse is condemned, being reckoned among the poisons only. Hence it is that the Flamen[92] of the Sacrifices is not allowed to touch a horse, notwithstanding that it is the

[92] Or Flamen Dialis. Festus gives another reason: lest the Flamen should travel to a distance, and so neglect his duties.

custom to immolate one[93] of these animals at the public sacrifices at Rome.

### CHAP. 41.—BLOOD.

The blood, also, of the horse is possessed of certain corrosive properties; and so, too, is mare's blood—except, indeed, where the animal has not been covered—it having the effect of cauterizing the margins of ulcers, and so enlarging them. Bull's blood too, taken fresh, is reckoned[94] among the poisons; except, indeed, at Ægira,[95] at which place the priestess of the Earth, when about to foretell coming events, takes a draught of bull's blood before she descends into the cavern: so powerful, in fact, is the agency of that sympathy so generally spoken of, that it may occasionally originate, we find, in feelings of religious awe,[96] or in the peculiar nature of the locality.

Drusus,[97] the tribune of the people, drank goats' blood, it is said; it being his object by his pallid looks to suggest that his enemy, Q. Cæpio, had given him poison, and so expose him to public hatred. So remarkably powerful is the blood of the he-goat, that there is nothing better in existence for sharpening iron implements, the rust produced by this blood giving them a better edge even than a file. Considering, however, that the blood of all animals cannot be reckoned as a remedy in common, will it not be advisable, in preference, to speak of the effects that are produced by that of each kind?

### CHAP. 42.—PECULIAR REMEDIES DERIVED FROM VARIOUS ANIMALS, AND CLASSIFIED ACCORDING TO THE MALADIES. REMEDIES AGAINST THE POISON OF SERPENTS, DERIVED FROM THE STAG, THE FAWN, THE OPHION, THE SHE-GOAT, THE KID, AND THE ASS.

We will therefore classify the various remedies, according to the maladies for which they are respectively used; and, first of all, those to which man has recourse for injuries inflicted by

[93] The "Equus October," sacrificed to Mars on the Campus Martius in October. This sacrifice was attended with some very ridiculous ceremonies.

[94] This, as already observed, was probably a fallacy.

[95] See B. iv. c. 6.

[96] His meaning is, that the excitement produced by religious feeling neutralizes that antipathy which, under ordinary circumstances, is manifested towards the system by bull's blood.

[97] See B. xxxiii. c. 6.

serpents. That deer are destructive to those reptiles[98] no one is ignorant; as also of the fact that they drag them from their holes when they find them, and so devour them. And it is not only while alive and breathing that deer are thus fatal to serpents, but even when dead and separated limb from limb. The fumes of their horns, while burning, will drive away serpents, as already[99] stated; but the bones, it is said, of the upper part of a stag's throat, if burnt upon a fire, will bring those reptiles together. Persons may sleep upon a deer's skin in perfect safety, and without any apprehension of attacks by serpents; its rennet too, taken with vinegar, is an effectual antidote to the stings of those reptiles; indeed, if it has been only touched by a person, he will be for that day effectually protected from them. The testes, dried, or the genitals of the male animal, are considered to be very wholesome, taken in wine, and so are the umbles, generally known as the "centipellio."[1] Persons having about them a deer's tooth, or who have taken the precaution of rubbing the body with a deer or fawn's marrow, will be sure to repel the attacks of all serpents.

But the most effectual remedy of all is thought to be the rennet of a fawn that has been cut from the uterus of the dam, as already[2] mentioned in another place. Deer's blood, burnt upon a fire of lentisk wood, with dracontium,[3] cunilago,[4] and alkanet, will attract serpents, they say; while, on the other hand, if the blood is removed and pyrethrum[5] substituted for it, they will take to flight.

I find an animal mentioned by Greek writers, smaller than the stag, but resembling it in the hair, and to which they give the name of "ophion."[6] Sardinia, they say, is the only country that produces it; I am of opinion, however, that it is now extinct, and for that reason I shall not enlarge upon its medicinal properties.

(10.) As a preservative against the attacks of serpents, the brains and blood of the wild boar are held in high esteem: the liver also, dried and taken in wine with rue; and the fat,

[98] See B. viii. c. 50.
[99] In B. viii. c. 50.
[1] Or "hundred skins." Called the *mirefeuillet* in French.
[2] In B. viii. c. 50.
[3] See B. xxiv. c. 91.
[4] See B. xx. c. 63.
[5] The Anthemis pyrethrum of Linnæus, Spanish camomile or pellitory.
[6] Possibly the Musmon of B. viii. c. 49. See also B. xxx. c. 52.

used with honey and resin. Similar properties are attributed to the liver of the domesticated boar and the outer filaments, and those only, of the gall, these last being taken in doses of four denarii; the brains also, taken in wine, are equally effectual. The fumes of the burning horns or hair of a she-goat will repel serpents, they say: the ashes, too, of the horns, used either internally or externally, are thought to be an antidote to their poison. A similar effect is attributed to goats' milk, taken with Taminian[7] grapes; to the urine of those animals, taken with squill vinegar; to goats' milk cheese, applied with origanum;[8] and to goat suet, used with wax.

In addition to all this, as will be seen hereafter, there are a thousand other remedial properties attributed to this animal; a fact which surprises me all the more, seeing that the goat, it is said, is never free from fever.[9] The wild animals of the same species, which are very numerous, as already[10] stated, have a still greater efficacy attributed to them; but the he-goat has certain properties peculiar to itself, and Democritus attributes properties still more powerful to the animal when it has been the only one yeaned. It is recommended also to apply she-goat's dung, boiled[11] in vinegar, to injuries inflicted by serpents, as also the ashes of fresh dung mixed with wine. As a general rule, persons who find that they are recovering but slowly from injuries inflicted by a serpent, will find their health more speedily re-established by frequenting the stalls where goats are kept. Those, however, whose object is a more assured remedy, attach immediately to the wound the paunch of a she-goat killed for the purpose, dung and all. Others, again, use the flesh of a kid just killed, and fumigate it with the singed hair, the smell of which has the effect of repelling serpents.

For stings of serpents, as also for injuries inflicted by the scorpion and shrew-mouse, some employ the skin of a goat newly killed, as also the flesh and dung of a horse that has been out at pasture, or a hare's rennet in vinegar. They say, too, that if a person has the body well rubbed with a hare's rennet, he will never receive injury from venomous animals. When a person has been stung by a scorpion, she-goat's dung,

[7] See B. xxiii. cc. 13, 14.
[8] See B. xx. c. 67.
[9] See B. viii. c. 76.
[10] In B. viii. c. 76.
[11] A remedy of which H. Cloquet highly approves, on chemical grounds.

boiled with vinegar, is considered a most efficient remedy: in cases too, where a buprestis has been swallowed, bacon and the broth in which it has been boiled, are highly efficacious. Nay, what is even more than this, if a person applies his mouth to an ass's ear, and says that he has been stung by a scorpion, the whole of the poison, they say, will immediately pass away from him and be transferred to the animal. All venomous creatures, it is said, are put to flight by a fumigation made by burning an ass's lights. It is considered an excellent plan too, to fumigate persons, when stung by a scorpion, with the smoke of burnt calves' dung.

### CHAP. 43.—REMEDIES FOR THE BITE OF THE MAD DOG. REMEDIES DERIVED FROM THE CALF, THE HE-GOAT, AND VARIOUS OTHER ANIMALS.

When a person has been bitten by a mad dog, it is the practice to make an incision round the wound to the quick, and then to apply raw veal to it, and to make the patient take either veal broth or hogs' lard, mixed with lime internally. Some persons recommend a he-goat's liver, and maintain that if it is applied to the wound the patient will never be attacked with hydrophobia. She-goat's dung, too, is highly spoken of, applied with wine, as also the dung of the badger, cuckoo, and swallow, boiled and taken in drink.

For bites inflicted by other animals, dried goats' milk cheese is applied with origanum and taken with the drink; and for injuries caused by the human[12] teeth, boiled beef is applied; veal, however, is still more efficacious for the purpose, provided it is not removed before the end of four days.

### CHAP. 44.—REMEDIES TO BE ADOPTED AGAINST ENCHANTMENTS.

The dried muzzle of a wolf, they say, is an effectual preservative against the malpractices of magic; and it is for this reason that it is so commonly to be seen fastened to the doors of farm-houses. A similar degree of efficacy, it is thought, belongs to the skin of the neck, when taken whole from the animal. Indeed, so powerful is the influence of this animal, in addition to what we have already[13] stated, that if a horse

[12] Cloquet says that the application would be useless.
[13] In B. viii. c. 34.

only treads in its track, it will be struck with torpor[14] in consequence.

CHAP. 45.—REMEDIES FOR POISONS.

In case where persons have swallowed quicksilver,[15] bacon is the proper remedy to be employed. Poisons are neutralized by taking asses' milk; henbane more particularly, mistletoe, hemlock, the flesh of the sea-hare, opocarpathon,[16] pharicon,[17] and dorycnium:[18] the same, too, where coagulated milk[19] has been productive of bad effects, for the biestings,[20] or first curdled milk, should be reckoned as nothing short of a poison.[21] We shall have to mention many other uses to which asses' milk is applied; but it should be remembered that in all cases it must be used fresh, or, if not, as new as possible, and warmed, for there is nothing that more speedily loses its virtue. The bones, too, of the ass are pounded and boiled, as an antidote to the poison of the sea-hare. The wild ass[22] is possessed of similar properties in every respect, but in a much higher degree.

Of the wild horse[23] the Greek writers have made no mention, it not being a native of their country; we have every reason to believe, however, that it has the same properties as the animal in a tame state, but much more fully developed. Mares' milk effectually neutralizes the venom of the sea-hare and all narcotic poisons. Nor had the Greeks any knowledge from experience of the urus[24] and the bison,[24] although in India the forests are filled with herds of wild oxen: it is only reasonable,

[14] Cloquet and Ajasson admit the truth of this statement: the latter suggests that it may be owing to electricity.

[15] It is no longer reckoned among the poisons.

[16] Juice of carpathum, a substance which does not appear to have been identified; but supposed by Bruce to have been a gum called *sassa*, with which aloes are adulterated in Abyssinia, a thing that Galen tells us was done with the carpathum of the ancients. The sea-hare is the Aplysia depilans of Gmelin. It is not poisonous. See B. ix. c. 72, and B. xxxii. c. 3.

[17] A composite poison, probably, the ingredients of which are now unknown.

[18] See Chap. 21 of this Book,

[19] See B. xx. c. 53.

[20] See B. xi. c. 96.

[21] On the contrary, cows' biestings are highly thought of in some parts of England; and a very delicate dish is made of them, baked.

[22] "Onager."

[23] See B. viii. c. 16, and B. xvi. c. 9.

[24] See B. viii. c. 15.

however, to conclude that all their medicinal properties must be much more highly developed than in the animal as found among us. It is asserted also, that cows' milk is a general counter-poison, in the cases above-mentioned, more particularly, as also where the poison of ephemeron[25] has settled internally, or cantharides have been administered; it acting upon the poison by vomit. Broth, too, made from goats' flesh, neutralizes the effects of cantharides, in a similar manner, it is said. To counteract the corrosive poisons which destroy by ulceration, veal or beef-suet is resorted to; and in cases where a leech has been swallowed, butter is the usual remedy, with vinegar heated with a red-hot iron. Indeed, butter employed by itself is a good remedy for poisons, for where oil is not to be procured, it is an excellent substitute for it. Used with honey, butter heals injuries inflicted by millepedes. The broth of boiled tripe, it is thought, is an effectual repellent of the above-mentioned poisons, aconite and hemlock more particularly; veal-suet also has a similar repute.

Fresh goats' milk cheese is given to persons who have taken mistletoe, and goats' milk itself is a remedy for cantharides. Taken with Taminian[26] grapes, goats' milk is an antidote to the effects of ephemeron. Goats' blood, boiled down with the marrow, is used as a remedy for the narcotic[27] poisons, and kids' blood for the other poisons. Kid's rennet is administered where persons have taken mistletoe, the juice of the white chamæleon,[28] or bull's blood; for which last, hare's rennet in vinegar is also used by way of antidote. For injuries inflicted by the pastinaca,[29] and the stings or bites of all kinds of marine animals, hare's rennet, kid's rennet, or lamb's rennet is taken, in doses of one drachma, in wine. Hare's rennet, too, generally forms an ingredient in the antidotes for poisons.

The moth that is seen fluttering about the flame of a lamp is generally reckoned in the number of the noxious substances: its bad effects are neutralized by the agency of goat's liver. Goat's gall, too, is looked upon as an antidote to venomous

[25] See B. xxv. c. 107, and B. xxvi. c. 75.

[26] See B. xxiii. cc. 13, 14.

[27] "Toxica"—properly, those poisons in which the barbarous nations dipped their arrows.

[28] See B. xxii. c. 21.

[29] Or, sting-ray.

preparations from the field weazel.[30] But we will now return to the other remedies, classified according to the various diseases.

CHAP. 46. (11.)—REMEDIES FOR DISEASES OF THE HEAD, AND FOR ALOPECY.

Bears' grease,[31] mixed with ladanum[32] and the plant adiantum,[33] prevents the hair from falling off; it is a cure also for alopecy and defects in the eyebrows, mixed with the fungus from the wick of a lamp, and the soot that is found in the nozzle. Used with wine, it is good for the cure of porrigo, a malady which is also treated with the ashes of deer's horns in wine: this last substance also prevents the growth of vermin in the hair. For porrigo some persons employ goat's gall, in combination with Cimolian chalk and vinegar, leaving the preparation to dry for a time on the head. Sow's gall, too, mixed with bull's urine, is employed for a similar purpose; and when old, it is an effectual cure, with the addition of sulphur, for furfuraceous eruptions. The ashes, it is thought, of an ass's genitals, will make the hair grow more thickly, and prevent it from turning grey; the proper method of applying it being to shave the head and to pound the ashes in a leaden mortar with oil. Similar effects are attributed to the genitals of an ass's foal, reduced to ashes and mixed with urine; some nard being added to render the mixture less offensive. In cases of alopecy the part affected is rubbed with bull's gall, warmed with Egyptian alum. Running ulcers of the head are successfully treated with bull's urine, or stale human urine, in combination with cyclaminos[34] and sulphur: but the most effectual remedy is calf's gall, a substance which, heated with vinegar, has also the effect of exterminating lice. Veal suet, pounded with salt and applied to ulcers of the head, is a very useful remedy: the fat, too, of the fox is highly spoken of, but the greatest value is set upon cats' dung, applied in a similar manner with mustard.

Powdered goats' horns, or the horns reduced to ashes, those of the he-goat in particular, with the addition of nitre, tamarisk-seed, butter, and oil, are remarkably effectual for preventing the hair from coming off, the head being first shaved for the purpose. So too, the ashes of burnt goats' flesh, applied

[30] See B. xxix. c. 16.

[31] This substance still maintains its reputation, as preservative of the hair.

[32] See B. xii. c. 37, and B. xxvi. c. 30.

[33] See B. xxii. c. 30.

[34] See B. xxv. c. 67.

to the eye-brows with oil, impart to them a black tint. By using goats' milk, they say, lice may be exterminated; and the dung of those animals, with honey, is thought to be a cure for alopecy: the ashes, too, of the hoofs, mixed with pitch, prevent the hair from coming off.

The ashes of a burnt hare, mixed with oil of myrtle, alleviate head-ache, the patient drinking some water that has been left in the trough after an ox or ass has been drinking there. The male organs of a fox, worn as an amulet, are productive, if we choose to believe it, of a similar effect: the same, too, with the ashes of a burnt deer's horn, applied with vinegar, rose oil, or oil of iris.

### CHAP. 47.—REMEDIES FOR AFFECTIONS OF THE EYES.

For defluxions[35] of the eyes, beef suet, boiled with oil, is applied to the parts affected; and for eruptions of those organs, ashes of burnt deer's horns are similarly employed, the tips of the horns being considered the most effectual for the purpose. For the cure of cataract, it is reckoned a good plan to apply a wolf's excrements: the same substance, too, reduced to ashes, is used for the dispersion of films, in combination with Attic honey. Bear's gall, too, is similarly employed; and for the cure of epinyctis, wild boar's lard, mixed with oil of roses, is thought to be very useful. An ass's hoof, reduced to ashes and applied with asses' milk, is used for the removal of marks in the eyes and indurations of the crystalline humours. Beef marrow, from the right fore leg, beaten up with soot, is employed for affections of the eyebrows, and for diseases of the eyelids and corners of the eyes. For the same purpose, also, a sort of calliblepharon[36] is prepared from soot, the best of all being that made from a wick of papyrus mixed with oil of sesame; the soot being removed with a feather and caught in a new vessel prepared for the purpose. This mixture, too, is very efficacious for preventing superfluous eyelashes from growing again when once pulled out.

Bull's gall is made up into eye-salves[37] with white of egg,

[35] If they are occasioned by irritation, Ajasson thinks that Pliny's remedy may be of some utility.

[36] A cosmetic for "beautifying the eye-brows."

[37] "Collyria."

these salves being steeped in water and applied to the eyes for four days successively. Veal suet, with goose-grease and the extracted juice of ocimum, is remarkably good for diseases of the eye-lids. Veal marrow, with the addition of an equal proportion of wax and oil or oil of roses, an egg being added to the mixture, is used as a liniment for indurations of the eye-lids. Soft goats' milk cheese is used as an application, with warm water, to allay defluxions of the eyes; but when they are attended with swelling, honey is used instead of the water. In both cases, however, the eyes should be fomented with warm whey. In cases of dry ophthalmia, it is found a very useful plan to take the muscles[38] lying within a loin of pork, and, after reducing them to ashes, to pound and apply them to the part affected.

She-goats, they say, are never affected with ophthalmia, from the circumstance that they browse upon certain kinds of herbs: the same, too, with the gazelle. Hence it is that we find it recommended, at the time of new moon, to swallow the dung of these animals, coated with wax. As they are able to see, too, by night, it is a general belief that the blood of a he-goat is a cure for those persons affected with dimness of sight to whom the Greeks have given the name of "nyctalopes."[39] A similar virtue is attributed to the liver of a she-goat, boiled in astringent wine. Some are in the habit of rubbing the eyes with the thick gravy[40] which exudes from a she-goat's liver roasted, or with the gall of that animal: they recommend the flesh also as a diet, and say that the patient should expose his eyes to the fumes of it while boiling: it is a general opinion, too, that the animal should be of a reddish colour. Another prescription is, to fumigate the eyes with the steam arising from the liver boiled in an earthen jar, or, according to some authorities, roasted.

Goats' gall is applied for numerous purposes: with honey, for films upon the eyes; with one-third part of white hellebore, for cataract; with wine, for spots upon the eyes, indurations of the cornea, films, webs, and argema; with extracted juice of cabbage, for diseases of the eyelids, the hairs being first pulled out, and the preparation left to dry on the parts affected;

[38] This is the translation suggested by Dalechamps for "lumbulis."
[39] "Seers by night." [40] "Sanie."

and with woman's milk, for rupture of the coats of the eye. For all these purposes, the gall is considered the most efficacious, when dried. Nor is the dung of this animal held in disesteem, being applied with honey for defluxions of the eyes. The marrow, too, of a goat, or a hare's lights, we find used for pains in the eyes; and the gall of a goat, with raisin wine or honey, for the dispersion of films upon those organs. It is recommended also, for ophthalmia, to anoint the eyes with wolf's fat or swine's marrow: we find it asserted, too, that persons who carry a wolf's tongue, inserted in a bracelet, will always be exempt from ophthalmia.

### CHAP. 48.—REMEDIES FOR DISEASES AND AFFECTIONS OF THE EARS.

Pains and diseases of the ears are cured by using the urine of a wild boar, kept in a glass vessel, or the gall of a wild boar, swine, or ox, mixed with castor-oil and oil of roses in equal proportions. But the best remedy of all is bull's gall, warmed with leek juice, or with honey, if there is any suppuration. Bull's gall too, warmed by itself in a pomegranate rind, is an excellent remedy for offensive exhalations from the ears: in combination with woman's milk, it is efficacious as a cure for ruptures of those organs. Some persons are of opinion that it is a good plan to wash the ears with this preparation in cases where the hearing is affected; while others again, after washing the ears with warm water, insert a mixture composed of the old slough of a serpent and vinegar, wrapped up in a dossil of wool. In cases, however, where the deafness is very considerable, gall warmed in a pomegranate rind with myrrh and rue, is injected into the ears; sometimes, also, fat bacon is used for this purpose, or fresh asses' dung, mixed with oil of roses: in all cases, however, the ingredients should be warmed.

The foam from a horse's mouth is better still, or the ashes of fresh horse dung, mixed with oil of roses: fresh butter too is good; beef-suet mixed with goose-grease; the urine of a bull or she-goat; or fullers' lant, heated to such a degree that the steam escapes by the neck of the vessel. For this purpose also, one third part of vinegar is mixed with a small portion of the urine of a calf, which has not begun to graze. They apply also to the ears calf's dung, mixed with the gall of that animal

and sloughs of serpents, care being taken to warm the ears before the application, and all the remedies being wrapped in wool. Veal-suet, too, is used, with goose-grease and extract of ocimum; or else veal marrow, mixed with bruised cummin and injected into the ears. For pains in the ears, the liquid ejected by a boar in copulation is used, due care being taken to receive it before it falls to the ground. For fractures of the ears, a glutinous composition is made from the genitals of a calf, which is dissolved in water when used; and for other diseases of those organs, foxes' fat is employed, goat's gall mixed with rose-oil warmed, or else extracted juice of leeks: in all cases where there is any rupture, these preparations are used in combination with woman's milk. Where a patient is suffering from hardness of hearing, ox-gall is employed, with the urine of a he or she-goat; the same, too, where there is any suppuration.

Whatever the purpose for which they are wanted, it is the general opinion that these substances are more efficacious when they have been smoked in a goat's horn for twenty days. Hare's rennet, too, is highly spoken of, taken in Aminean[41] wine, in the proportion of one third of a denarius of rennet to one half of a denarius of sacopenum.[42] Bears' grease, mixed with equal proportions of wax and bull-suet, is a cure for imposthumes of the parotid glands: some persons add hypocisthis[43] to the composition, or else content themselves with employing butter only, after first fomenting the parts affected with a decoction of fenugreek, the good effects of which are augmented by strychnos. The testes, too, of the fox, are very useful for this purpose; as also bull's blood, dried and reduced to powder. She-goats' urine, made warm, is used as an injection for the ears; and a liniment is made of the dung of those animals, in combination with axle-grease.

### CHAP. 49.—REMEDIES FOR TOOTH-ACHE.

The ashes of deer's horns strengthen loose teeth and allay tooth-ache, used either as a friction or as a gargle. Some persons, however, are of opinion that the horn, unburnt and reduced to powder, is still more efficacious for all these purposes. Dentifrices are made both from the powder and the ashes. Another

[41] See B. xiv. c. 4.
[42] See B. xx. c. 75.
[43] See B. xxvi. c. 31.

excellent remedy is a wolf's head, reduced to ashes: it is a well-known fact, too, that there are bones generally found in the excrements of that animal; these bones, attached to the body as an amulet, are productive of advantageous effects. For the cure of tooth-ache, hare's rennet is injected into the ear: the head also of that animal, reduced to ashes, is used in the form of a dentifrice, and, with the addition of nard, is a corrective of bad breath. Some persons, however, think it a better plan to mix the ashes of a mouse's head with the dentifrice. In the side of the hare there is a bone found, similar to a needle in appearance: for the cure of tooth-ache it is recommended to scarify the gums with this bone. The pastern-bone of an ox, ignited and applied to loose teeth which ache, has the effect of strengthening them in the sockets; the same bone, reduced to ashes, and mixed with myrrh, is also used as a dentifrice. The ashes of burnt pig's feet are productive of a similar effect, as also the calcined bones of the cotyloïd cavities in which the hip-bones move. It is a well-known fact, that, introduced into the throat of beasts of burden, these bones are a cure for worms, and that, in a calcined state, they are good for strengthening the teeth.

When the teeth have been loosened by a blow, they are strengthened by using asses' milk, or else ashes of the burnt teeth of that animal, or a horse's lichen, reduced to powder, and injected into the ear with oil. By lichen[45] I do not mean the hippomanes, a noxious substance which I purposely forbear to enlarge upon, but an excrescence which forms upon the knees of horses, and just above the hoofs. In the heart[46] of this animal there is also found a bone which bears a close resemblance to the eye-teeth of a dog: if the gums are scarified with this bone, or with a tooth taken from the jaw-bone of a dead horse, corresponding in place with the tooth affected, the pain will be removed, they say. Anaxilaüs assures us that if the liquid which exudes from a mare when covered, is ignited on the wick of a lamp, it will give out a most marvellous representation[47] of horses' heads; and the same with reference

[44] See B. xxi. c. 105.

[45] See B. viii. c. 66.

[46] See B. xi. c. 70. Ajasson remarks that this bone is only found in animals that have undergone much fatigue, and that it results from the consolidation of certain tendinous fibres which form the ligament of the heart.

[47] "Capitum visus" seems to be a more probable reading than "capi-

to the she-ass. As to the hippomanes, it is possessed of properties so virulent and so truly magical, that if it is only thrown into fused metal[48] which is being cast into the resemblance of an Olympian mare, it will excite in all stallions that approach it a perfect frenzy for copulation.

Another remedy for diseases of the teeth is joiners' glue, boiled in water and applied, care being taken to remove it very speedily, and instantly to rinse the teeth with wine in which sweet pomegranate-rind has been boiled. It is considered, also, a very efficacious remedy to wash the teeth with goats' milk, or bull's gall. The pastern-bones of a she-goat just killed, reduced to ashes, and indeed, to avoid the necessity for repetition, of any other four-footed beast reared in the farm-yard, are considered to make an excellent dentifrice.

### CHAP. 50. (12.)—REMEDIES FOR DISEASES OF THE FACE.

It is generally believed that asses' milk effaces wrinkles in the face, renders the skin more delicate, and preserves its whiteness: and it is a well-known fact, that some women are in the habit of washing their face with it seven[49] hundred times daily, strictly observing that number. Poppæa, the wife of the Emperor Nero, was the first to practise this; indeed, she had sitting-baths, prepared solely with asses' milk, for which purpose whole troops of she-asses[50] used to attend her on her journies.[51] Purulent eruptions on the face are removed by an application of butter, but white lead, mixed with the butter, is an improvement. Pure butter, alone, is used for serpiginous eruptions of the face, a layer of barley-meal being powdered over it. The caul of a cow that has just calved, is applied, while still moist, to ulcers of the face.

The following recipe may seem frivolous, but still, to please the women,[52] it must not be omitted; the pastern-bone of a white steer, they say, boiled forty days and forty nights, till it is

tum usus" given by Sillig. Be it what it may, the meaning of the passage is doubtful.

[48] See Ælian, Var. Hist. xiv. 18.

[49] There surely must be a wrong reading here, or he cannot intend this to be understood literally.

[50] See B. xi. c. 96.

[51] One of the mistresses of Louis XV. not only did this, but (in a spirit of great charity and consideration, of course) gave the milk to the poor after she had thus used it.

[52] "Ad desideria mulierum."

quite dissolved, and then applied to the face in a linen cloth, will remove wrinkles and preserve the whiteness of the skin. An application of bull's dung, they say, will impart a rosy tint to the cheeks, and not crocodilea[53] even is better for the purpose; the face, however, must be washed with cold water, both before and after the application. Sun-burns and all other discolorations of the skin, are removed by the aid of calves' dung kneaded up by hand with oil and gum; ulcerations and chaps of the mouth, by an application of veal or beef-suet, mixed with goose-grease and juice of ocimum. There is another composition, also, made of veal-suet with stag's marrow and leaves of white-thorn, the whole beaten up together. Marrow, too, mixed with resin, even if it be cow marrow only, is equally good; and the broth of cow-beef is productive of similar effects. A most excellent remedy for lichens on the face is a glutinous substance prepared from the genitals of a male calf, melted with vinegar and live sulphur, and stirred together with the branch of a fig-tree: this composition is applied twice a day, and should be used quite fresh. This glue, similarly prepared from a decoction of honey and vinegar, is a cure for leprous spots, which are also removed by applying a he-goat's liver warm.

Elephantiasis, too, is removed by an application of goats' gall; and leprous spots and furfuraceous eruptions by employing bull's gall with the addition of nitre, or else asses' urine about the rising of the Dog-star. Spots on the face are removed by either bull's gall or ass's gall diluted in water by itself, care being taken to avoid the sun or wind after the skin has peeled off. A similar effect is produced, also, by using bull's gall or calf's gall, in combination with seed of cunila and the ashes of a deer's horn, burnt at the rising of Canicula.

Asses' fat, in particular, restores the natural colour to scars and spots on the skin caused by lichen or leprosy. A he-goat's gall, mixed with cheese, live sulphur, and sponge reduced to ashes, effectually removes freckles, the composition being brought to the consistency of honey before being applied. Some persons, however, prefer using dried gall, and mix with it warm bran, in the proportion of one obolus to four oboli of honey, the spots being rubbed briskly first. He-goat suet, too, is highly

[53] See c. 28 of this Book.

efficacious, used in combination with gith, sulphur, and iris; this mixture being also employed, with goose-grease, stag's marrow, resin, and lime, for the cure of cracked lips. I find it stated by certain authors, that persons who have freckles on the skin are looked upon as disqualified from taking any part in the sacrifices prescribed by the magic art.

CHAP. 51.—REMEDIES FOR DISEASES OF THE TONSILLARY GLANDS, AND FOR SCROFULA.

Cow's milk or goat's milk is good for ulcerations of the tonsillary glands and of the trachea. It is used in the form of a gargle, warm from the udder or heated, goat's milk being the best, boiled with mallows and a little salt. A broth made from tripe is an excellent gargle for ulcerations of the tongue and trachea; and for diseases of the tonsillary glands, the kidneys of a fox are considered a sovereign remedy, dried and beaten up with honey, and applied externally. For quinzy, bull's gall or goat's gall is used, mixed with honey. A badger's liver, taken in water, is good for offensive breath, and butter has a healing effect upon ulcerations of the mouth. When a pointed or other substance has stuck in the throat, by rubbing it externally with cats' dung, the substance, they say, will either come up again or pass downwards into the stomach.

Scrofulous sores are dispersed by applying the gall of a wild boar or of an ox, warmed for the purpose: but it is only when the sores are ulcerated that hare's rennet is used, applied in a linen cloth with wine. The ashes of the burnt hoof of an ass or horse, applied with oil or water, is good for dispersing scrofulous sores; warmed urine also; the ashes of an ox's hoof, taken in water; cow-dung, applied hot with vinegar; goat-suet with lime; goats' dung, boiled in vinegar; or the testes of a fox. Soap,[54] too, is very useful for this purpose, an invention of the Gauls for giving a reddish[55] tint to the hair. This substance is prepared from tallow and ashes, the best ashes for the purpose being those of the beech and yoke-elm: there are two kinds of it, the hard soap and the liquid, both of them much used by the people of Germany, the men, in particular, more than the women.

[54] See Beckmann's *Hist. Inv.* II. 92-3, *Bohn's Ed.*, where this subject is treated at considerable length.

[55] "Rutilandis capillis."

CHAP. 52.—REMEDIES FOR PAINS IN THE NECK.

For pains in the neck, the part should be well rubbed with butter or bears' grease; and for a stiff neck, with beef suet, a substance which, in combination with oil, is very useful for the cure of scrofula. For the painful cramp, attended with inflexibility, to which people give the name of "opisthotony," the urine of a she-goat, injected into the ears, is found very useful; as also a liniment made of the dung of that animal, mixed with bulbs.

In cases where the nails have been crushed, it is an excellent plan to attach to them the gall of any kind of animal. Whitlows upon the fingers should be treated with dried bull's gall, dissolved in warm water. Some persons are in the habit of adding sulphur and alum, of each an equal weight.

CHAP. 53.—REMEDIES FOR COUGH AND FOR SPITTING OF BLOOD.

A wolf's liver, administered in mulled wine, is a cure for cough; a bear's gall also, mixed with honey; the ashes of the tips of a cow's horn; or else the saliva of a horse, taken in the drink for three consecutive days—in which last case the horse will be sure to die, they say.[56] A deer's lights are useful for the same purpose, dried with the gullet of the animal in the smoke, and then beaten up with honey, and taken daily as an electuary: the spitter[57] deer, be it remarked, is the kind that is the most efficacious for the purpose.

Spitting of blood is cured by taking ashes of burnt deer's horns, or else a hare's rennet in drink, in doses of one-third of a denarius, with Samian earth and myrtle-wine. The dung of this last animal, reduced to ashes and taken in the evening, with wine, is good for coughs that are recurrent at night. The smoke, too, of a hare's fur, inhaled, has the effect of bringing off from the lungs such humours as are difficult to be discharged by expectoration. Purulent ulcerations of the chest and lungs, and bad breath proceeding from a morbid state of the lungs, are successfully treated with butter boiled with an equal quantity of Attic honey till it assumes a reddish hue, a spoonful of the mixture being taken by the patient every morning: some persons, however, instead of honey prefer using larch-resin for the purpose. In cases where there are

[56] "Eam mori tradunt." The reading here is very doubtful.

[57] "Subulo."

discharges of blood, cow's blood, they say, is good, taken in small quantities with vinegar; but as to bull's blood, it would be a rash thing to believe in any such recommendation. For inveterate spitting of blood, bull-glue is taken, in doses of three oboli, in warm water.

CHAP. 54. (13.)—REMEDIES FOR AFFECTIONS OF THE STOMACH.

Ulcerations of the stomach are effectually treated with asses' milk[58] or cows' milk. For gnawing pains in that region, beef is stewed, with vinegar and wine. Fluxes are healed by taking the ashes of burnt deer's horns; and discharges of blood by drinking the blood of a kid just killed, made hot, in doses of three cyathi, with equal proportions of vinegar and tart wine; or else by taking kid's rennet, with twice the quantity of vinegar.

CHAP. 55.—REMEDIES FOR LIVER COMPLAINTS AND FOR ASTHMA.

Liver complaints are cured by taking a wolf's liver dried, in honied wine; or by using the dried liver of an ass, with twice the quantity of rock-parsley and three nuts, the whole beaten up with honey and taken with the food. The blood, too, of a he-goat is prepared and taken with the food. For persons suffering from asthma, the most efficient remedy of all is the blood of wild horses[59] taken in drink; and next to that, asses' milk boiled with bulbs, the whey being the part used, with the addition of nasturtium steeped in water and tempered with honey, in the proportion of one cyathus of nasturtium to three semi-sextarii of whey. The liver or lights of a fox, taken in red wine, or bear's gall in water, facilitate the respiration.

CHAP. 56.—REMEDIES FOR PAINS IN THE LOINS.

For pains in the loins and all other affections which require emollients, frictions with bears' grease should be used; or else ashes of stale boars' dung or swine's dung should be mixed with wine and given to the patients. The magicians, too, have added to this branch of medicine their own fanciful devices. In the first place of all, madness in he-goats, they say, may be effectually calmed by stroking the beard; and if the beard is cut off, the goat will never stray to another flock.

[58] Asses' milk is still recommended for pulmonary phthisis.

[59] See B. viii. c. 16.

To the above composition they add goats' dung, and recommend it to be held in the hollow of the hand, as hot as possible, a greased linen cloth being placed beneath, and care being taken to hold it in the right hand if the pain is on the left side, and in the left hand if the pain is on the right. They recommend also that the dung employed for this purpose should be taken up on the point of a needle made of copper. The mode of treatment is, for the patient to hold the mixture in his hand till the heat is felt to have penetrated to the loins, after which the hand is rubbed with a pounded leek, and the loins with the same dung annealed with honey. They prescribe also for the same malady the testes of a hare, to be eaten by the patient. In cases of sciatica they are for applying cow-dung warmed upon hot ashes in leaves: and for pains in the kidneys they recommend a hare's kidneys to be swallowed raw, or perhaps boiled, but without letting them be touched by the teeth. If a person carries about him the pastern-bone of a hare, he will never be troubled with pains in the bowels, they say.

## CHAP. 57.—REMEDIES FOR AFFECTIONS OF THE SPLEEN.

Affections of the spleen are alleviated by taking the gall of a wild boar or hog in drink; ashes of burnt deer's horns in vinegar; or, what is best of all, the dried spleen of an ass, the good effects being sure to be felt in the course of three days. The first dung voided by an ass's foal—a substance known as "polea"[60] by the people of Syria—is administered in oxymel for these complaints; a dried horse tongue, too, is taken in wine, a sovereign remedy which, Cæcilius Bion tells us, he first heard of when living among the barbarous nations. The milt of a cow or ox is used in a similar manner; but when it is quite fresh, the practice is to roast or boil it and take it with the food. For pains in the liver a topical application is made by bruising twenty heads of garlick in one sextarius of vinegar, and applying them in a piece of ox bladder. For the same malady the magicians recommend a calf's milt, bought at the price set upon it and without any haggling, that being an important point, and one that should be religiously observed. This done, the milt must be cut in two lengthwise, and attached

[60] This would appear to be a Greek word in reality.

to the patient's shirt,[61] on either side; after which, the patient must put it on and let the pieces fall at his feet, and must then pick them up, and dry them in the shade. While this last is doing, the diseased liver of the patient will gradually contract, they say, and he will eventually be cured. The lights, too, of a fox are very useful for this purpose, dried on hot ashes and taken in water; the same, too, with a kid's milt, applied to the part affected.

CHAP. 58. (14.)—REMEDIES FOR BOWEL COMPLAINTS.

To arrest looseness of the bowels, deer's blood is used; the ashes also of deer's horns; the liver of a wild boar, taken fresh and without salt, in wine; a swine's liver roasted, or that of a he-goat, boiled in five semisextarii of wine; a hare's rennet boiled, in quantities the size of a chick-pea, in wine, or, if there are symptoms of fever, in water. To this last some persons add nut-galls, while others, again, content themselves with hare's blood boiled by itself in milk. Ashes, too, of burnt horse-dung are taken in water for this purpose; or else ashes of the part of an old bull's horn which lies nearest the root, sprinkled in water; the blood, too, of a he-goat boiled upon charcoal; or a decoction made from a goat's hide boiled with the hair on.

For relaxing the bowels a horse's rennet is used, or else the blood, marrow, or liver of a she-goat. A similar effect is produced by applying a wolf's gall to the navel, with elaterium;[62] by taking mares' milk, goats' milk with salt and honey, or a she-goat's gall with juice of cyclaminos,[63] and a little alum—in which last case some prefer adding nitre and water to the mixture. Bull's gall, too, is used for a similar purpose, beaten up with wormwood and applied in the form of a suppository; or butter is taken, in considerable doses.

Cœliac affections and dysentery are cured by taking cow's liver; ashes of deer's horns, a pinch in three fingers swallowed in water; hare's rennet, kneaded up in bread, or, if there is any discharge of blood, taken with polenta;[64] or else boar's

[61] "Tunica."

[62] See B. xx. c. 2.

[63] See B. xxv. c. 67. Mares' milk is *not* a purgative; and goats' milk, as Ajasson remarks, is somewhat astringent. Juice of Cyclamen, on the other hand, or sow-bread, is highly purgative.

[64] See B. xviii. c. 14.

dung, swine's dung, or hare's dung, reduced to ashes and mixed with mulled wine. Among the remedies, also, for the cœliac flux and dysentery, veal broth is reckoned, a remedy very commonly used. If the patient takes asses' milk for these complaints, it will be all the better if honey is added; and no less efficacious for either complaint are the ashes of asses' dung taken in wine; or else polea, the substance above[65]-mentioned. In such cases, even when attended with a discharge of blood, we find a horse's rennet recommended, by some persons known as "hippace;" ashes of burnt horse-dung; horses' teeth pounded; and boiled cows' milk. In cases of dysentery, it is recommended to add a little honey; and, for the cure of griping pains, ashes of deer's horns, bull's gall mixed with cummin, or the flesh of a gourd, should be applied to the navel. For both complaints new cheese made of cows' milk is used, as an injection; butter also, in the proportion of four semisextarii to two ounces of turpentine, or else employed with a decoction of mallows or with oil of roses. Veal-suet or beef-suet is also given, and the marrow of those animals is boiled with meal, a little wax, and some oil, so as to form a sort of pottage. This marrow, too, is kneaded up with bread for a similar purpose; or else goats' milk is used, boiled down to one half. In cases, too, where there are gripings in the bowels, wine of the first running[66] is administered. For the last-named pains, some persons are of opinion that it is a sufficient remedy to take a single dose of hare's rennet in mulled wine; though others again, who are more distrustful, are in the habit of applying a liniment to the abdomen, made of goats' blood, barley-meal, and resin.

For all defluxions of the bowels it is recommended to apply soft cheese, and for cœliac affections and dysentery old cheese, powdered, one cyathus of cheese being taken in three cyathi of ordinary wine. Goats' blood is boiled down with the marrow of those animals for the cure of dysentery; and the cœliac flux is effectually treated with the roasted liver of a she-goat, or, what is still better, the liver of a he-goat boiled in astringent wine, and administered in the drink, or else applied to the navel with oil of myrtle. Some persons boil down the liver in three sextarii of water to half a sextarius, and then add rue to it.

[65] In Chap. 57 of this Book.

[66] "Protropum." See B. xiv. cc. 9. 11.

The milt of a he or she-goat is sometimes roasted for this purpose, or the suet of a he-goat is incorporated in bread baked upon the ashes; the fat, too, of a she-goat, taken from the kidneys more particularly, is used. This last, however, must be taken by itself and swallowed immediately, being generally recommended to be taken in water moderately cool. Some persons, too, boil goats' suet in water, with a mixture of polenta, cummin, anise, and vinegar; and for the cure of cœliac affections, they rub the abdomen with a decoction of goats' dung and honey.

For both the cœliac flux and dysentery, kid's rennet is employed, taken in myrtle wine in pieces the size of a bean, or else kid's blood, prepared in the form of a dish known by the name of "sanguiculus."[67] For dysentery an injection is employed, made of bull glue dissolved in warm water. Flatulency is dispelled by a decoction of calf's dung in wine. For intestinal affections deer's rennet is highly recommended, boiled with beef and lentils, and taken with the food; hare's fur, also reduced to ashes and boiled with honey; or boiled goat's milk, taken with a small quantity of mallows and some salt; if rennet is added, the remedy will be all the more effectual. Goat suet, taken in any kind of broth, is possessed of similar virtues, care being taken to swallow cold water immediately after. The ashes of a kid's thighs are said to be marvellously efficacious for intestinal hernia; as also hare's dung, boiled with honey, and taken daily in pieces the size of a bean; indeed, these remedies are said to have proved effectual in cases where a cure has been quite despaired of. The broth too, made from a goat's head, boiled with the hair on, is highly recommended.

### CHAP. 59.—REMEDIES FOR TENESMUS, TAPEWORM, AND AFFECTIONS OF THE COLON.

The disease called "tenesmus," or in other words, a frequent and ineffectual desire to go to stool, is removed by drinking asses' milk or cows' milk. The various kinds of tapeworm[68] are expelled by taking the ashes of deer's horns in drink. The bones

[67] A kind of black pudding. Dupinet, the old French translator, says that in his time the people of the Alpine regions still called this dish *sanchet*.

[68] He uses "tænia" probably, as a general name for intestinal worms.

which we have spoken[69] of as being found in the excrements of the wolf, worn attached to the arm, are curative of diseases of the colon, provided they have not been allowed to touch the ground. Polea, too, a substance already mentioned,[70] is remarkably useful for this purpose, boiled in grape juice:[71] the same too with swine's dung, powdered and mixed with cummin, in a decoction of rue. The antler of a young stag, reduced to ashes and taken in wine, mixed with African snails, crushed with the shells on, is considered a very useful remedy.

### CHAP. 60. (15.)—REMEDIES FOR AFFECTIONS OF THE BLADDER, AND FOR URINARY CALCULI.

Diseases of the bladder, and the torments attendant upon calculi, are treated with the urine of a wild boar, or the bladder of that animal taken as food; both of them being still more efficacious if they have been thoroughly soaked first. The bladder, when eaten, should be boiled first, and if the patient is a female, it should be a sow's bladder. There are found in the liver of the wild boar certain small stones,[72] or what in hardness resemble small stones, of a white hue, and resembling those found in the liver of the common swine: if these stones are pounded and taken in wine, they will expel calculi, it is said. So oppressed is the wild boar by the burden of his urine,[73] that if he has not first voided it, he is unable to take to flight, and suffers himself to be taken as though he were enchained to the spot. This urine, they say, has a consuming effect upon urinary calculi. The kidneys of a hare, dried and taken in wine, act as an expellent upon calculi. We have already[74] mentioned that in the gammon of the hog there are certain joint-bones; a decoction made from them is remarkably useful for urinary affections. The kidneys of an ass, dried and pounded, and administered in undiluted wine, are a cure for diseases of the bladder. The excrescences that grow on horses' legs, taken for forty days in ordinary wine or honied wine, expel urinary calculi. The ashes, too, of

[69] In c. 49 of this Book.

[70] In c. 57 of this Book.

[71] "Sapa." Grape-juice boiled down to two-thirds: see B. xiv. c. 11.

[72] In reality, these are biliary calculi, found in the gall-bladder of the animal. They are called "bezoar" stones, from a Persian word signifying "destructive to poison."

[73] See B. viii. c. 77.

[74] In c. 49 of this Book.

a horse's hoof, taken in wine or water, are considered highly useful for this purpose; and the same with the dung of a she-goat—if a wild goat, all the better—taken in honied wine: goats' hair, too, is used, reduced to ashes.

For carbuncles upon the generative organs, the brains and blood of a wild boar or swine are highly recommended: and for serpiginous affections of those parts, the liver of those animals is used, burnt upon juniper wood more particularly, and mixed with papyrus and arsenic;[75] the ashes, also, of their dung; ox-gall, kneaded to the consistency of honey, with Egyptian alum and myrrh, beet-root boiled in wine being laid upon it; or else beef. Running ulcers of those parts are treated with veal-suet and marrow, boiled in wine, or with the gall of a she-goat, mixed with honey and the extracted juice of the bramble.[76] In cases where these ulcers are serpiginous, it is recommended to use goats' dung with honey or vinegar, or else butter by itself. Swellings of the testes are reduced by using veal-suet with nitre, or the dung of the animal boiled in vinegar. The bladder of a wild boar, eaten roasted, acts as a check upon incontinence of urine; a similar effect being produced by the ashes of the feet of a wild boar or swine sprinkled in the drink; the ashes of a sow's bladder taken in drink; the bladder or lights of a kid; a hare's brains taken in wine; the testes of a male hare grilled; the rennet of that animal taken with goose-grease and polenta;[77] or the kidneys of an ass, beaten up and taken in undiluted wine.

The magicians tell us, that after taking the ashes of a boar's genitals in sweet wine, the patient must make water in a dog kennel, and repeat the following formula—"This I do that I may not wet my bed as a dog does." On the other hand, a swine's bladder, attached to the groin, facilitates the discharge of the urine, provided it has not already touched the ground.

### CHAP. 61.—REMEDIES FOR DISEASES OF THE GENERATIVE ORGANS AND OF THE FUNDAMENT.

For diseases of the fundament, a sovereign remedy is bear's gall, mixed with the grease; to which some persons are in the

[75] Ajasson remarks that arsenic should be used with the greatest care in such a case.

[76] "Rubi." He probably means the bramble-berry.

[77] See B. xviii. c. 14.

habit of adding litharge and frankincense. Butter, too, is very good, employed with goose-grease and oil of roses. The proportions in which they are mixed will be regulated by the circumstances of the case, care being taken to see that they are of a consistency which admits of their being easily applied. Bull's gall upon lint is a remarkably useful remedy, and has the effect of making chaps of the fundament cicatrize with great rapidity. Swellings of those parts are treated with veal suet—that from the loins in particular—mixed with rue. For other affections, goats' blood is used, with polenta. Goats' gall, too, is employed by itself, for the cure of condylomata, and sometimes, wolf's gall, mixed with wine.

Bears' blood is curative of inflamed tumours and apostemes upon these parts in general; as also bulls' blood, dried and powdered. The best remedy, however, is considered to be the stone which the wild ass[78] voids with his urine, it is said, at the moment he is killed. This stone, which is in a somewhat liquefied state at first, becomes solid when it reaches the ground: attached to the thigh, it disperses all collections of humours and all kinds of suppurations: it is but rarely found, however, and it is not every wild ass that produces it, but as a remedy it is held in high esteem. Asses' urine too, used in combination with gith, is highly recommended; the ashes of a horse's hoof, applied with oil and water; a horse's blood, that of a stone-horse in particular; the blood, also, of an ox or cow, or the gall of those animals. Their flesh too, applied warm, is productive of similar results; the hoofs reduced to ashes, and taken in water or honey; the urine of a she-goat; the flesh of a he-goat, boiled in water; the dung of these animals, boiled with honey; or else a boar's gall, or swine's urine, applied in wool.

Riding on horseback, we well know, galls and chafes the inside of the thighs: the best remedy for accidents of this nature is to rub the parts with the foam which collects at a horse's mouth. Where there are swellings in the groin, arising[79] from ulcers, a cure is effected by inserting in the sores three horse-hairs, tied with as many knots.

[78] "Onager."

[79] Arising, by sympathy, from sores in other parts of the body.

CHAP. 62. (16.)—REMEDIES FOR GOUT AND FOR DISEASES OF THE FEET.

For the cure of gout, bears' grease is employed, mixed in equal proportions with bull-suet and wax; some persons add to the composition, hypocisthis[80] and nut-galls. Others, again, prefer he-goat suet, mixed with the dung of a she-goat and saffron, or else with mustard, or sprigs of ivy pounded and used with perdicium,[81] or with flowers of wild cucumber. Cow-dung is also used, with lees of vinegar. Some persons speak highly in praise of the dung of a calf which has not begun to graze, or else a bull's blood, without any other addition; a fox, also, boiled alive till only the bones are left; a wolf boiled alive in oil to the consistency of a cerate; he-goat suet, with an equal proportion of helxine,[82] and one-third part of mustard; or ashes of goats' dung, mixed with axle-grease. They say, too, that for sciatica, it is an excellent plan to apply this dung boiling[83] hot beneath the great toes; and that, for diseases of the joints, it is highly efficacious to attach bears' gall or hares' feet to the part affected. Gout, they say, may be allayed by the patient always carrying about with him a hare's foot, cut off from the animal alive.

Bears' grease is a cure for chilblains and all kinds of chaps upon the feet; with the addition of alum, it is still more efficacious. The same results are produced by using goat-suet; a horse's teeth powdered; the gall of a wild boar or hog; or else the lights of those animals, applied with their grease; and this, too, where the soles are blistered, or the feet have been crushed by a substance striking against them. In cases where the feet have been frozen, ashes of burnt hare's fur are used; and for contusions of the feet, the lights of that animal are applied, sliced or reduced to ashes. Blisters occasioned by the sun are most effectually treated by using asses' fat, or else beef-suet, with oil of roses. Corns, chaps, and callosities of the feet are cured by the application of wild boars' dung or swine's dung, used fresh, and removed at the end of a couple

[80] See B. xxvi. c. 31. Bears' grease is of no use whatever for the cure of gout.

[81] See B. xix. c. 31, B. xxi. cc. 62, 104, and B. xxii. cc. 19, 20.

[82] See B. xxi. c. 56.

[83] This mode of cure, Ajasson says, is still employed in the East, where the preparation is known by the name of *moza*.

of days. The pastern-bones of these animals are also used, reduced to ashes; or else the lights of a wild boar, swine, or deer. When the feet have been galled by the shoes, they are rubbed with the urine of an ass, applied with the mud formed by it upon the ground. Corns are treated with beef-suet and powdered frankincense; chilblains with burnt leather, that of an old shoe, in particular; and injuries produced by tight shoes with ashes of goat-skin, tempered with oil.

The pains attendant upon varicose veins are mitigated by using ashes of burnt calves' dung, boiled with lily roots and a little honey: a composition which is equally good for all kinds of inflammations and sores that tend to suppurate. It is very useful, also, for gout and diseases of the joints, when it is the dung of a bull-calf that is used more particularly. For excoriations of the joints, the gall of a wild boar or swine is applied, in a warm linen cloth: the dung, also, of a calf that has not begun to graze; or else goat-dung, boiled in vinegar with honey. Veal-suet rectifies malformed nails, as also goat-suet, mixed with sandarach. Warts are removed by applying ashes of burnt calves' dung in vinegar, or else the mud formed upon the ground by the urine of an ass.

### CHAP. 63.—REMEDIES FOR EPILEPSY.

In cases of epilepsy, it is a good plan to eat a bear's testes, or those of a wild boar, with mares' milk or water; or else to drink a wild boar's urine with honey and vinegar, that being the best which has been left to dry in the bladder. The testes, also, of swine are prescribed, dried and beaten up in sows' milk, the patient abstaining from wine some days before and after taking the mixture. The lights of a hare, too, are recommended, salted, and taken with one third of frankincense, for thirty consecutive days, in white wine: hare's rennet also; and asses' brains, smoked with burning leaves, and administered in hydromel, in doses of half an ounce per day. An ass's hoofs are reduced to ashes, and taken for a month together, in doses of two spoonfuls; the testes, also, of an ass, salted and mixed with the drink, asses' milk or water in particular. The secundines, also, of a she-ass are recommended, more particularly when it is a male that has been foaled: placed beneath the nostrils of the patient, when the fits are likely to come on, this substance will effectually repel them.

There are some persons who recommend the patient to eat the heart of a black he-ass in the open air with bread, upon the first or second day of the moon: others, again, prescribe the flesh of that animal, and others the blood, diluted with vinegar, and taken for forty days together. Some mix horse-stale for this purpose, with smithy water fresh from the forge, employing the same mixture for the cure of delirium. Epilepsy is also treated with mares' milk, or the excrescences from a horse's legs, taken in honey and vinegar. The magicians highly recommend goats' flesh, grilled upon a funeral pile; as also the suet of that animal, boiled with an equal quantity of bull's gall, and kept in the gall-bladder; care being taken not to let it touch the ground, and the patient swallowing it in water, standing aloft.[84] The smell arising from a goat's horns or deer's antlers, burnt, efficiently detects the presence of epilepsy.

In cases where persons are suddenly paralyzed, the urine of an ass's foal, applied to the body with nard, is very useful, it is said.

### CHAP. 64.—REMEDIES FOR JAUNDICE.

For the cure of jaundice, the ashes of a stag's antlers are employed; or the blood of an ass's foal, taken in wine. The first dung,[85] too, that has been voided by the foal after its birth, taken in wine, in pieces the size of a bean, will effect a cure by the end of three days. The dung of a new-born colt is possessed of a similar efficacy.

### CHAP. 65.—REMEDIES FOR BROKEN BONES.

For broken bones, a sovereign remedy is the ashes of the jaw-bone of a wild boar or swine: boiled bacon, too, tied round the broken bone, unites it with marvellous rapidity. For fractures of the ribs, goats' dung, applied in old wine, is extolled as the grand remedy, being possessed in a high degree of aperient, extractive, and healing properties.

### CHAP. 66.—REMEDIES FOR FEVERS.

Deer's flesh, as already[86] stated, is a febrifuge. Periodical

[84] "Potum vero ex aquâ sublime." The true reading and the meaning are equally doubtful.

[85] Spoken of as "polea" in c. 57.

[86] In B. viii. c. 50. Because the animal itself was supposed to be free from fever.

and recurrent fevers are cured, if we are to believe what the magicians tell us, by wearing the right eye of a wolf, salted, and attached as an amulet. There is one kind of fever generally known as "amphemerine;"[87] it is to be cured, they say, by the patient taking three drops of blood from an ass's ear, and swallowing them in two semi-sextarii of water. For quartan fever, the magicians recommend cats' dung to be attached to the body, with the toe of a horned owl, and, that the fever may not be recurrent, not to be removed until the seventh paroxysm is past. Who,[88] pray, could have ever made such a discovery as this? And what, too, can be the meaning of this combination? Why, of all things in the world, was the toe of a horned owl made choice of?

Other adepts in this art, who are more moderate in their suggestions, recommend for quartan fever, the salted liver of a cat that has been killed while the moon was on the wane, to be taken in wine just before the paroxysms come on. The magicians recommend, too, that the toes of the patient should be rubbed with the ashes of burnt cow-dung, diluted with a boy's urine, and that a hare's heart should be attached to the hands; they prescribe, also, hare's rennet, to be taken in drink just before the paroxysms come on. New goats' milk cheese is also given with honey, the whey being carefully extracted first.

### CHAP. 67. (17.)—REMEDIES FOR MELANCHOLY, LETHARGY, AND PHTHISIS.

For patients affected with melancholy,[89] calves' dung, boiled in wine, is a very useful remedy. Persons are aroused from lethargy by applying to the nostrils the callosities from an ass's legs steeped in vinegar, or the fumes of burnt goats' horns or hair, or by the application of a wild boar's liver: a remedy which is also used for confirmed[90] drowsiness.

The cure of phthisis is effected by taking a wolf's liver boiled in thin wine; the bacon of a sow that has been fed upon herbs; or the flesh of a she-ass, eaten with the broth: this last mode in particular, being the one that is employed by

[87] Or "quotidian," daily fever.

[88] A rather singular episode in his narrative. It looks like a gloss.

[89] Under this name, as Ajasson remarks, the affections now called "hysteria" are included.

[90] "Veternum."

the people of Achaia. They say too, that the smoke of dried cow-dung—that of the animal when grazing, I mean—is remarkably good for phthisis, inhaled through a reed ;[91] and we find it stated that the tips of cows' horns are burnt, and administered with honey, in doses of two spoonfuls, in the form of pills. Goat suet, many persons say, taken in a pottage of alica,[92] or melted fresh with honied wine, in the proportion of one ounce of suet to one cyathus of wine, is good for cough and phthisis, care being taken to stir the mixture with a sprig of rue. One author of credit assures us that before now, a patient whose recovery has been despaired of, has been restored to health by taking one cyathus of wild goat[93] suet and an equal quantity of milk. Some writers, too, have stated that ashes of burnt swine's dung are very useful, mixed with raisin wine ; as also the lights of a deer, a spitter[94] deer in particular, smoke-dried and beaten up in wine.

### CHAP. 68.—REMEDIES FOR DROPSY.

For dropsy, a wild boar's urine is good, taken in small doses in the patient's drink ; it is of much greater efficacy, however, when it has been left to dry in the bladder of the animal. The ashes, too, of burnt cow-dung, and of bulls' dung in particular —animals that are reared in herds, I mean—are highly esteemed. This dung, the name given to which is "bolbiton,"[95] is reduced to ashes, and taken in doses of three spoonfuls to one semisextarius of honied wine ; that of the female animal being used where the patient is a woman, and that of the other sex in the case of males ; a distinction about which the magicians have made a sort of grand mystery. The dung of a bull-calf is also applied topically for this disease, and ashes of burnt calves' dung are taken with seed of staphylinos,[96] in equal proportions, in wine. Goats' blood also is used, with the marrow ; but it is generally thought that the blood of the he-goat is the most efficacious, when the animal has fed upon lentisk, more particularly.

[91] Another instance of smoking, though not a very tempting one.
[92] See B. xviii. c. 29.
[93] "Rupicapra."
[94] "Subulo."
[95] From the Greek.
[96] See B. xix. c. 27, B. xx. c. 15, and B. xxv. c. 64.

CHAP. 69.—REMEDIES FOR ERYSIPELAS, AND FOR PURULENT ERUPTIONS.

For erysipelas a liniment of bears' grease is used, that from the kidneys in particular; fresh calves' dung also, or cow-dung; dried goats' milk cheese, with leeks; or else the fine scrapings of a deer's skin, brought off with pumice-stone and beaten up in vinegar. Where there is redness of the skin attended with itching, the foam from a horse's mouth is used, or the hoof, reduced to ashes.

For the cure of purulent[97] eruptions ashes of burnt asses' dung are applied, with butter; and for the removal of swarthy pimples, dried goats' milk cheese, steeped in honey and vinegar, is applied in the bath, no oil being used. Pustules are treated with ashes of swine's dung, applied with water, or else ashes of deer's antlers.

CHAP. 70.—REMEDIES FOR SPRAINS, INDURATIONS, AND BOILS.

For the cure of sprains the following applications are used; wild boars' dung or swine's dung; calves' dung; wild boars' foam, used fresh with vinegar; goats' dung, applied with honey; and raw beef, used as a plaster. For swellings, swine's dung is used, warmed in an earthen pot, and beaten up with oil. The best emollient for all kinds of indurations upon the body is wolf's fat, applied topically. In the case of sores which are wanted to break, the most effectual plan is to apply cow-dung warmed in hot ashes, or else goats' dung boiled in vinegar or wine. For the cure of boils, beef-suet is applied with salt; but if they are attended with pain, it is melted with oil, and no salt is used. Goat-suet is employed in a similar manner.

CHAP. 71.—REMEDIES FOR BURNS. THE METHOD OF TESTING BULL-GLUE; SEVEN REMEDIES DERIVED FROM IT.

For the treatment of burns, bears' grease is used, with lily roots; dried wild boars' dung also, or swine's dung; the ashes of burnt bristles, extracted from plasterers' brushes, beaten up with grease; the pastern-bone of an ox, reduced to ashes, and mixed with wax and bull's marrow or deer's marrow; or the dung of a hare. The dung, too, of a she-goat, they say, will effect a cure without leaving any scars.

[97] "Eruptionibus pituitæ."

The best glue is that prepared from the ears and genitals of the bull, and there is no better cure in existence for burns. There is nothing, however, that is more extensively adulterated; which is done by boiling up all kinds of old skins, and shoes even, for the purpose. The Rhodian glue is the purest of all, and it is this that painters and physicians mostly use. The whiter it is, the more highly glue is esteemed: that, on the other hand, which is black and brittle like wood, is looked upon as good for nothing.

### CHAP. 72.—REMEDIES FOR AFFECTIONS OF THE SINEWS AND FOR CONTUSIONS.

For pains in the sinews, goats' dung, boiled in vinegar with honey, is considered one of the most useful remedies, and this even where the sinew[98] is threatened with putrefaction. Strains and contusions are healed with wild boars' dung, that has been gathered in spring and dried. A similar method is employed where persons have been dragged by a chariot or lacerated by the wheels, or have received contusions in any other way, the application being quite as effectual, should the dung happen to be fresh. Some think it a better plan, however, to boil it in vinegar; and if only powdered and taken in vinegar, they vouch for its good effects where persons are ruptured, wounded internally, or suffering from the effects of a fall.

Others again, who are of a more scrupulous tendency,[99] take the ashes of it in water; and the Emperor Nero, it is said, was in the habit of refreshing himself with this drink, when he attempted to gain the public applause at the three-horse chariot races.[1] Swine's dung, it is generally thought, is the next best to that of the goat.

### CHAP. 73. (18.)—REMEDIES FOR HÆMORRHAGE.

Hæmorrhage is arrested by applying deer's rennet with vinegar, hare's rennet, hare's fur reduced to ashes, or ashes of burnt asses' dung. The dung, however, of male animals is the most efficacious for this purpose, being mixed with vinegar, and applied with wool, in all cases of hæmorrhage. In the same way, too, the ashes of a horse's head or thigh, or of burnt calves' dung, are used with vinegar; the ashes also of a goat's horns or dung,

[98] Where the sinew has been wounded and exposed, either vinegar or honey, Ajasson remarks, would be a highly dangerous application.

[99] "Reverentiores."

[1] "Trigario."

with vinegar. But it is the thick blood that issues from the liver of a he-goat when cut asunder, that is looked upon as the most efficacious; or else the ashes of the burnt liver of a goat of either sex, taken in wine or applied to the nostrils with vinegar. The ashes, too, of a leather wine-bottle—but only when made of he-goat skin—are used very efficiently with an equal quantity of resin, for the purpose of stanching blood, and knitting together the lips of the wound. A kid's rennet in vinegar, or the thighs of that animal, reduced to ashes, are said to be productive of a similar result.

### CHAP. 74.—REMEDIES FOR ULCERS AND CARCINOMATOUS SORES.

Ulcers upon the legs and thighs are cured by an application of bears' grease, mixed with red earth: and those of a serpiginous nature by using wild boar's gall, with resin and white lead; the jaw-bone of a wild boar or swine, reduced to ashes; swine's dung in a dry state; or goats' dung, made luke-warm in vinegar. For other kinds of ulcers butter is used, as a detergent, and as tending to make new flesh; ashes of deer's antlers, or deer's marrow; or else bull's gall, mixed with oil of cyprus[2] or oil of iris. Wounds inflicted with edged weapons are rubbed with fresh swine's dung, or with dried swine's dung, powdered. When ulcers are phagedænic or fistulous, bull's gall is injected, with leek-juice or woman's milk; or else bull's blood, dried and powdered, with the plant cotyledon.[3]

Carcinomatous sores are treated with hare's rennet, sprinkled upon them with an equal proportion of capers in wine; gangrenes, with bears' grease, applied with a feather; and ulcers of a serpiginous nature with the ashes of an ass's hoofs, powdered upon them. The blood of the horse corrodes the flesh by virtue of certain septic powers which it possesses; dried horse-dung, too, reduced to ashes, has a similar effect. Those kinds of ulcers which are commonly known as "phagedænic," are treated with the ashes of a cow's hide, mixed with honey. Calves' flesh, as also cow-dung mixed with honey, prevents recent wounds from swelling. The ashes of a leg of veal, applied with woman's milk, are a cure for sordid ulcers, and the malignant sore known as "cacoëthes:"[4] bull-glue, melted, is

[2] See B. xii. c. 51. [3] See B. xxv. c. 101.

[4] "Bad habit." A sort of cancer, or malignant ulcer.

applied to recent wounds inflicted with edged weapons, the application being removed before the end of three days. Dried goats' milk cheese, applied with vinegar and honey, acts as a detergent upon ulcers; and goat suet, used in combination with wax, arrests the spread of serpiginous sores: if employed with pitch and sulphur, it will effect a thorough cure. The ashes of a kid's leg, applied with woman's milk, have a similar effect upon malignant ulcers; for the cure, too, of carbuncles, a sow's brains are roasted and applied.

### CHAP. 75.—REMEDIES FOR THE ITCH.

The itch in man is cured very effectually by using the marrow of an ass, or the urine of that animal, applied with the mud it has formed upon the ground. Butter, too, is very good; as also in the case of beasts of burden, if applied with warmed resin: bull glue is also used, melted in vinegar, and incorporated with lime; or goat's gall, mixed with calcined alum. The eruption called "boa,"[5] is treated with cow-dung, a fact to which it is indebted for its name. The itch in dogs is cured by an application of fresh cows' blood, which, when quite dry, is renewed a second time, and is rubbed off the next day with strong lie-ashes.

### CHAP. 76.—METHODS OF EXTRACTING FOREIGN SUBSTANCES WHICH ADHERE TO THE BODY, AND OF RESTORING SCARS TO THEIR NATURAL COLOUR.

Thorns and similar foreign substances are extracted from the body by using cats' dung, or that of she-goats, with wine; the rennet also of any kind of animal, that of the hare more particularly, with powdered frankincense and oil, or an equal quantity of mistletoe, or else with bee-glue.[6]

Ass suet restores scars of a swarthy hue to their natural colour; and they are equally effaced by using calf's gall made warm. Medical men add myrrh, honey, and saffron, and keep the mixture in a copper box; some, too, incorporate with it flower of copper.

### CHAP. 77. (19.)—REMEDIES FOR FEMALE DISEASES.

Menstruation is promoted by using bull's gall, in unwashed wool, as a pessary: Olympias of Thebes adds hyssop and nitre.

[5] See B. xxiv. c. 35.

[6] "Propolis." See B. xi. c. 6.

Ashes, too, of deer's horns are taken in drink for the same purpose, and for derangements of the uterus they are applied topically, as also bull's gall, used as a pessary with opium, in the proportion of two oboli. It is a good plan, too, to use fumigations for the uterus, made with deer's hair, burnt. Hinds, they say, when they find themselves pregnant, are in the habit of swallowing a small stone. This stone, when found in their excrements, or in the uterus—for it is to be found there as well—attached to the body as an amulet, is a preventive of abortion. There are also certain small stones, found in the heart and uterus of these animals, which are very useful for women during pregnancy and in travail. As to the kind of pumice-stone which is similarly found in the uterus of the cow, we have already[7] mentioned it when treating of the formation of that animal.

A wolf's fat, applied externally, acts emolliently upon the uterus, and the liver of a wolf is very soothing for pains in that organ. It is found advantageous for women, when near delivery, to eat wolf's flesh, or, if they are in travail, to have a person near them who has eaten it; so much so, indeed, that it will act as a countercharm even to any noxious spells which may have been laid upon them. In case, however, a person who has eaten wolf's flesh should happen to enter the room at the moment of parturition, dangerous effects will be sure to follow. The hare, too, is remarkably useful for the complaints of females: the lights of that animal, dried and taken in drink, are beneficial to the uterus; the liver, taken in water with Samian earth, acts as an emmenagogue; and the rennet brings away the after-birth, due care being taken by the patient not to bathe the day before. Applied in wool as a pessary, with saffron and leek-juice, this last acts as an expellent upon the dead fœtus. It is a general opinion that the uterus of a hare, taken with the food, promotes the conception of male offspring, and that a similar effect is produced by using the testes and rennet of that animal. It is thought, too, that a leveret, taken from the uterus of its dam, is a restorative of fruitfulness to women who are otherwise past child-bearing. But it is the blood of a hare's fœtus that the magicians recommend males to drink: while for young girls they prescribe nine pellets of hare's dung, to ensure a durable firmness to the breasts. For a similar purpose, also,

[7] In B. xi. c. 79.

they apply hare's rennet with honey; and to prevent hairs from growing again when once removed, they use a liniment of hare's blood.

For inflations of the uterus, it is found a good plan to apply wild boars' dung or swine's dung topically with oil: but a still more effectual remedy is to dry the dung, and sprinkle it, powdered, in the patient's drink, even though she should be in a state of pregnancy or suffering the pains of child-birth. By administering sow's milk with honied wine, parturition is facilitated; and if taken by itself it will promote the secretion of the milk when deficient in nursing women. By rubbing the breasts of famales with sow's blood they are prevented from becoming too large. If pains are felt in the breasts, they will be alleviated by drinking asses' milk; and the same milk, taken with honey, has considerable efficacy as an emmenagogue. Stale fat, too, from the same animal, heals ulcerations of the uterus: applied as a pessary, in wool, it acts emolliently upon indurations of that organ; and, applied fresh by itself, or in water when stale, it has all the virtues of a depilatory.

An ass's milt, dried and applied in water to the breasts, promotes the secretion of the milk; and used in the form of a fumigation, it acts as a corrective upon the uterus. A fumigation made with a burnt ass's hoof, placed beneath a woman, accelerates parturition, so much so, indeed, as to expel the dead fœtus even: hence it is that it should only be employed in cases of miscarriage, it having a fatal effect upon the living fœtus. Asses' dung, applied fresh, has a wonderful effect, they say, in arresting discharges of blood in females: the same, too, with the ashes of this dung, which, used as a pessary, are very good for the uterus. If the skin is rubbed with the foam from a horse's mouth for forty days together, before the first hair has made its appearance, it will effectually prevent the growth thereof: a decoction, too, made from deer's antlers is productive of a similar effect, being all the better if they are used quite fresh. Mares' milk, used as an injection, is highly beneficial to the uterus.

Where the fœtus is felt to be dead in the uterus, the lichens or excrescences from a horse's legs, taken in fresh water, will act as an expellent: an effect produced also by a fumigation made with the hoofs or dry dung of that animal.

Procidence of the uterus is arrested by using butter, in the form of an injection; and indurations of that organ are removed by similarly employing ox-gall, with oil of roses, turpentine being applied externally in wool. They say, too, that a fumigation, made from ox-dung, acts as a corrective upon procidence of the uterus, and facilitates parturition; and that conception is promoted by the use of cows' milk. It is a well-known fact that sterility is often entailed by suffering in child-birth; an evil which may be averted, Olympias of Thebes assures us, by rubbing the parts, before sexual intercourse, with bull's gall, serpents' fat, verdigrease, and honey. In cases, too, where menstruation is too abundant, the external parts should be sprinkled with a solution of calf's gall, the moment, before the sexual congress; a method which acts emolliently also upon indurations of the abdomen. Applied to the navel as a liniment, it arrests excessive discharges, and is generally beneficial to the uterus. The proportions generally adopted are—one denarius of gall, one-third of a denarius of opium, and as much oil of almonds as may appear to be requisite; the whole being applied in sheep's wool. The gall, too, of a bull-calf is beaten up with half the quantity of honey, and kept in readiness for the treatment of uterine diseases. If a woman about the time of conception eats roasted veal with the plant aristolochia,[8] she will bring forth a male child, we are assured. Calf's marrow, boiled in wine and water with the suet, and applied as a pessary, is good for ulcerations of the uterus; the same, too, with foxes' fat and cats' dung, the last being applied with resin and oil of roses.

It is considered a remarkably good plan to subject the uterus to fumigations made with burnt goats' horns. The blood of the wild goat, mixed with sea-palm,[9] acts as a depilatory. The gall of the other kinds of goat, used as an injection, acts emolliently upon callosities of the uterus, and ensures conception immediately after menstruation: it possesses also the virtues of a depilatory, the application being left for three days upon the flesh after the hair has been removed. The midwives assure us that she-goats' urine, taken in drink, and the dung, applied topically, will arrest uterine discharges, however much in excess. The membrane in which the kid is enclosed in the uterus, dried and taken in wine, acts as an expel-

[8] See B. xxv. cc. 79, 84, 91. [9] See B. xiii. c. 49.

lent upon the after-birth. For affections of the uterus, it is thought a desirable plan to fumigate it with burnt kids' hair; and for discharges of blood, kids' rennet is administered in drink, or seed of henbane is applied. According to Osthanes, if a woman's loins are rubbed with blood taken from the ticks upon a black wild bull, she will be inspired with an aversion to sexual intercourse: she will forget, too, her former love, by taking a he-goat's urine in drink, some nard being mixed with it to disguise the loathsome taste.

### CHAP. 78.—REMEDIES FOR THE DISEASES OF INFANTS.

For infants there is nothing more useful than butter,[10] either by itself or in combination with honey; for dentition more particularly, for soreness of the gums, and for ulcerations of the mouth. A wolf's tooth, attached to the body, prevents infants from being startled, and acts as a preservative against the maladies attendant upon dentition; an effect equally produced by making use of a wolf's skin. The larger teeth, also, of a wolf, attached to a horse's neck, will render him proof against all weariness, it is said. A hare's rennet, applied to the breasts of the nurse, effectually prevents diarrhœa in the infant suckled by her. An ass's liver, mixed with a little panax, and dropped into the mouth of an infant, will preserve it from epilepsy and other diseases to which infants are liable; this, however, must be done for forty days, they say. An ass's skin, too, thrown over infants, renders them insensible to fear. The first teeth shed by a horse, attached as an amulet to infants, facilitate dentition, and are better still, when not allowed to touch the ground. For pains in the spleen, an ox's milt is administered in honey, and applied topically; and for running ulcers it is used as an application, with honey. A calf's milt, boiled in wine, is beaten up, and applied to incipient ulcers of the mouth.

The magicians take the brains of a she-goat, and, after passing them through a gold ring, drop them into the mouth of the infant before it takes the breast, as a preservative against epilepsy and other infantile diseases. Goats' dung, attached to infants in a piece of cloth, prevents them from being restless, female infants in particular. By rubbing the gums of

[10] There is probably some truth in these statements as to the utility of butter and honey for infants.

infants with goats' milk or hare's brains, dentition is greatly facilitated.

### CHAP. 79.—PROVOCATIVES OF SLEEP.

Cato was of opinion that hare's flesh,[11] taken as a diet, is provocative of sleep. It is a vulgar notion, too, that this diet confers beauty for nine days on those who use it; a silly play[12] upon words, no doubt, but a notion which has gained far too extensively not to have had some real foundation. According to the magicians, the gall of a she-goat, but only of one that has been sacrificed, applied to the eyes or placed beneath the pillow, has a narcotic effect. Too profuse perspiration is checked by rubbing the body with ashes of burnt goats' horns mixed with oil of myrtle.

### CHAP. 80.—STIMULANTS FOR THE SEXUAL PASSIONS.

Among the aphrodisiacs, we find mentioned, a wild boar's gall, applied externally; swine's marrow, taken inwardly; asses' fat, mixed with the grease of a gander and applied as a liniment; the virulent substance described by Virgil[13] as distilling from mares when covered; and the dried testes of a horse, pulverized and mixed with the drink. The right testicle, also, of an ass, is taken in a proportionate quantity of wine, or worn attached to the arm in a bracelet; or else the froth discharged by that animal after covering, collected in a piece of red cloth and enclosed in silver, as Osthanes informs us. Salpe recommends the genitals of this animal to be plunged seven times in boiling oil, and the corresponding parts to be well rubbed therewith. Bialcon[14] says that these genitals should be reduced to ashes and taken in drink; or else the urine that has been voided by a bull immediately after covering: he recommends, also, that the groin should be well rubbed with earth moistened with this urine.

[11] Ajasson explains this by saying that the hare being eaten by the people of ancient Latium on festival days, with plenteous potations, they erroneously supposed the narcotic effects of the wine to be produced by the flesh of the hare.

[12] The resemblance of "lepos," "grace," to "lepus," "a hare." See Martial, B. v. Ep. 29.

[13] Georg. iii. 280. He alludes to the "hippomanes."

[14] Hardouin is probably right in his suggestion that "Dalion" is the correct reading here.

Mouse-dung, on the other hand, applied in the form of a liniment, acts as an antaphrodisiac. The lights of a wild boar or swine, roasted, are an effectual preservative against drunkenness; they must, however, be eaten fasting, and upon the same day. The lights of a kid, too, are productive of the same effect.

CHAP. 81. (20.)—REMARKABLE FACTS RELATIVE TO ANIMALS.

In addition to those already mentioned, there are various other marvellous facts related, with reference to these animals. When a horse-shoe becomes detached from the hoof, as often is the case, if a person takes it up and puts it by, it will act as a remedy for hiccup the moment he calls to mind the spot where he has placed it. A wolf's liver, they say, is similar to a horse's hoof in appearance; and a horse, they tell us, if it follows in the track of a wolf, will burst[15] asunder beneath its rider. The pastern-bones of swine have a certain tendency to promote discord, it is said. In cases of fire, if some of the dung can be brought away from the stalls, both sheep and oxen may be got out all the more easily, and will make no attempt to return. The flesh of a he-goat will lose its rank smell, if the animal has eaten barley-bread, or drunk an infusion of laser[16] the day on which it was killed. Meat that has been salted while the moon was on the wane, will never be attacked by worms. In fact, so great has been the care taken to omit no possible researches, that a deaf hare, we find, will grow fat[17] sooner than one that can hear!

As to the remedies for the diseases of animals—If a beast of burden voids blood, an injection must be used of swine's dung mixed with wine. For the maladies of oxen, a mixture of suet is used with quicksilver, and wild garlic boiled; the whole beaten up and administered in wine. The fat, too, of a fox is employed. The liquor of boiled horse-flesh, administered in their drink, is recommended for the cure of diseased swine: and, indeed, the maladies of all four-footed beasts may be effec-

[15] He has already stated, in c. 44, that a horse will become torpid if it follows in the track of a wolf; for which statement, according to Ajasson, there appears to be some foundation.

[16] See B. xix. c. 15.

[17] This is not unlikely; for it has no alarms to make it grow thin.

tually treated by boiling a she-goat whole, in her skin, along with a bramble-frog. Poultry, they say, will never be touched by a fox, if they have eaten the dried liver of that animal, or if the cock, when treading the hen, has had a piece of fox's skin about his neck. The same property, too, is attributed to a weazel's gall. The oxen in the Isle of Cyprus cure themselves of gripings in the abdomen, it is said, by swallowing[18] human excrements: the feet, too, of oxen will never be worn to the quick, if their hoofs are well rubbed with tar before they begin work. Wolves will never approach a field, if, after one has been caught and its legs broken and throat cut, the blood is dropped little by little along the boundaries of the field, and the body buried on the spot from which it was first dragged. The share, too, with which the first furrow in the field has been traced in the current year, should be taken from the plough, and placed upon the hearth of the Lares, where the family is in the habit of meeting, and left there till it is consumed: so long as this is in doing, no wolf will attack any animal in the field.

We will now turn to an examination of those animals which, being neither tame nor wild, are of a nature peculiar to themselves.

SUMMARY. — Remedies, narratives, and observations, one thousand six hundred and eighty-two.

ROMAN AUTHORS QUOTED.—M. Varro,[19] L. Piso,[20] Fabianus,[21] Valerius Antias,[22] Verrius Flaccus,[23] Cato the Censor,[24] Servius Sulpicius,[25] Licinius Macer,[26] Celsus,[27] Massurius,[28] Sextius Niger[29]

[18] See B. viii. c. 41, as to a similar practice on the part of the panther.
[19] See end of B. ii.
[20] See end of B. ii.
[21] For Fabianus Papirius, see end of B. ii. For Fabianus Sabinus, see end of B. xviii.
[22] See end of B. ii.
[23] See end of B. iii.
[24] See end of B. iii.
[25] Servius Sulpicius Lemonia Rufus, a contemporary and friend of Cicero. He was Consul with M. Claudius Marcellus, B.C. 51, and died B.C. 43, at the siege of Mutina. He left about 180 treatises on various subjects; but beyond the fact that he is often quoted by the writers whose works form part of the Digest, none of his writings (with the exception of two letters to Cicero) have come down to us.
[26] See end of B. xix.
[27] See end of B. vii.
[28] See end of B. vii.
[29] See end of B. xii.

who wrote in Greek, Bithus[30] of Dyrrhachium, Opilius[31] the physician, Granius[32] the physician.

FOREIGN AUTHORS QUOTED.—Democritus,[33] Apollonius[34] who wrote the "Myrosis," Miletus,[35] Artemon,[36] Sextilius,[37] Antæus,[38] Homer, Theophrastus,[39] Lysimachus,[40] Attalus,[41] Xenocrates,[42] Orpheus[43] who wrote the "Idiophya," Archelaüs[44] who wrote a similar work, Demetrius,[45] Sotira,[46] Laïs,[47] Ele-

[30] From the mention made of him in Chap. 23, he was probably a physician. Nothing further is known of him.

[31] Aurelius Opilius, the freedman of an Epicurean. He taught philosophy, rhetoric, and grammar at Rome, but finally withdrew to Smyrna. One of his works, mentioned by A. Gellius, was entitled "Musæ," and the name of another was "Pinax."

[32] From the mention made of his profound speculations in Chap. 9, Fabricius has reckoned him among the medical writers of Rome. It has also been suggested that he may have been the Granius Flaccus mentioned by Censorinus as the author of the "Indigitamenta," or Register of the Pontiffs.

[33] See end of B. ii.

[34] Probably Apollonius Mus, or Myronides, a physician who flourished in the first century B.C., who is mostly identified with Apollonius Herophileius. His "Myrosis" here mentioned is probably the work "On Unguents" mentioned by Athenæus, B. xv.

[35] Nothing whatever is known of him. It has been suggested that the name may have been "Melitus." A contemporary of Socrates, an orator and tragic writer, was so named.

[36] Beyond the mention of him in c. 2 of this Book, nothing is known relative to this medical writer: no great loss, perhaps, if we may judge from the extract there given.

[37] Though mentioned among the foreign writers, the name is evidently Roman. Nothing relative to him is known.

[38] See end of B. xii.

[39] See end of B. iii.

[40] Probably the writer mentioned at the end of B. viii.

[41] See end of B. viii.

[42] See end of B. xx.

[43] See end of B. xx. The "Idiophya" was probably a work "On the Peculiar Animals," which passed as the composition of the mythic Orpheus.

[44] A Greek poet, said to have been born at Chersonesus, a town in Egypt. Some of his Epigrams are still extant in the Anthology, and it has been suggested that he flourished either in the time of Ptolemy Soter, of Ptolemy Euergetes II., or of Ptolemy Philadelphus. His work "On Peculiar Animals," here mentioned, was probably written in verse.

[45] See end of B. viii.

[46] A female writer on medical subjects. In addition to her work mentioned in Chap. 23 of this Book, Labbe speaks of a work of hers in MS. "On Menstruation," preserved in the Library at Florence.

[47] The female who is mentioned in Chap. 23 of this Book as having written on Abortion, or the Diseases peculiar to Females, was probably a

phantis,[48] Salpe,[49] Olympias[50] of Thebes, Diotimus[51] of Thebes, Iollas,[52] Andreas,[53] Marcion[54] of Smyrna, Æschines[55] the physician, Hippocrates,[56] Aristotle,[57] Metrodorus[58] of Scepsos, Icetidas[59] the physician, Apelles[60] the physician, Hesiod,[61] Dalion,[62] Cæcilius,[63] Bion[64] who wrote "On Powers,"[64*] Anaxilaüs,[65] King Juba.[66]

different person from either of the two famous courtesans of that name. Nothing whatever is known of her.

[48] The writer of certain amatory poems, much admired by the Emperor Tiberius, generally supposed, from the grammatical form of the name, to have been a female. Galen quotes a work "On Cosmetics," as written by a person of this name.

[49] A native of Lemnos, who wrote on the Diseases of Women. Nymphodorus, as quoted by Athenæus, states that she also wrote verses on Sportive subjects. [50] See end of B. xx.

[51] Beyond the mention made of him in c. 23, nothing further is known relative to this writer. Theophrastus, in his work on Sudorifics, speaks of a person of this name as having written on Perspiration.

[52] See end of B. xii. [53] See end of B. xx.

[54] Beyond the mention made of him in c. 7 of this Book, nothing is known of this writer. Hardouin suggests that he may have been identical with the Micton mentioned at the end of B. xx.

[55] He is spoken of as a native of Athens, in c. 10 of this Book. Beyond this, nothing is known of him.

[56] See end of B. vii. [57] See end of B. ii. [58] See end of B. iii.

[59] Or more probably, Hicetidas. Nothing is known of this writer.

[60] A native of Thasos. He is also mentioned by Galen.

[61] See end of B. vii. [62] See end of B. vi.

[63] Probably a physician, of whom Athenæus speaks as being a native of Argos, and writer of a treatise on Fish.

[64] Probably a different writer from the one of that name mentioned at the end of B. vi. [64*] Περὶ δυνάμεων.

[65] See end of B. xxi. [66] See end of B. v.

# BOOK XXIX.

## REMEDIES DERIVED FROM LIVING CREATURES.

### CHAP. 1. (1.)—THE ORIGIN OF THE MEDICAL ART.

THE nature and multiplicity of the various remedies already described or which still remain to be enlarged upon, compel me to enter upon some further details with reference to the art of medicine itself: aware as I am, that no one[1] has hitherto treated of this subject in the Latin tongue, and that if all new enterprises are difficult or of doubtful success, it must be one in particular which is so barren of all charms to recommend it, and accompanied with such difficulties of illustration. It will not improbably suggest itself, however, to those who are familiar with this subject, to make enquiry how it is that in the practice of medicine the use of simples has been abandoned, so convenient as they are and so ready prepared to our hand: and they will be inclined to feel equal surprise and indignation when they are informed that no known art, lucrative as this is beyond all the rest, has been more fluctuating, or subjected to more frequent variations.

Commencing by ranking its inventors in the number of the gods,[2] and consecrating for them a place in heaven, the art of medicine, at the present day even, teaches us in numerous instances to have recourse to the oracles for aid. In more recent times again, the same art has augmented its celebrity, at the cost perhaps of being charged with criminality, by devising the fable that Æsculapius was struck by lightning for presuming to raise Tyndareus[3] to life. And this example notwithstanding, it has not hesitated to relate how that others, through its agency, have since been restored to life. Already enjoying celebrity in the days

[1] He must surely have forgotton Celsus; unless, indeed, Pliny was unacquainted with his treatise "De Medicinâ."

[2] Apollo and Æsculapius, Agenor, Hercules, Chiron, and others.

[3] The husband of Leda, and the father of Castor, Timandra, Clytæmnestra, and Philonoë. Hippolytus also was fabled to have been raised from the dead by Æsculapius.

of the Trojan War, its traditions from that period have acquired an additional degree of certainty; although in those times, we may remark, the healing art confined itself solely to the treatment of wounds.

CHAP. 2.—PARTICULARS RELATIVE TO HIPPOCRATES. DATE OF THE ORIGIN OF CLINICAL PRACTICE AND OF THAT OF IATRALIPTICS.

Its succeeding history, a fact that is truly marvellous, remains enveloped in the densest night, down to the time of the Peloponnesian War;[4] at which period it was restored to light by the agency of Hippocrates, a native of Cos, an island flourishing and powerful in the highest degree, and consecrated to Æsculapius. It being the practice for persons who had recovered from a disease to describe in the temple of that god the remedies to which they had owed their restoration to health, that others might derive benefit therefrom in a similar emergency; Hippocrates, it is said, copied out these prescriptions, and, as our fellow-countryman Varro will have it, after burning the temple to the ground,[4*] instituted that branch of medical practice which is known as "Clinics."[5] There was no limit after this to the profits derived from the practice of medicine; for Prodicus,[6] a native of Selymbria, one of his disciples, founded the branch of it known as "Iatraliptics,"[7] and so discovered a means of enriching the very anointers even and the commonest drudges[8] employed by the physicians.

CHAP. 3.—PARTICULARS RELATIVE TO CHRYSIPPUS AND ERASISTRATUS.

In the rules laid down by these professors, changes were effected by Chrysippus with a vast parade of words, and, after

[4] Hippocrates is generally supposed to have been born B.C. 460.

[4*] In order to destroy the medical books and prescriptions there. The same story is told, with little variation, of Avicenna. Cnidos is also mentioned as the scene of this act of philosophical incendiarism.

[5] "Clinice"—Chamber-physic, so called because the physician visited his patients ἐν κλίνῃ, "in bed."

[6] It is supposed by most commentators that Pliny commits a mistake here, and that in reality he is alluding to Herodicus of Selymbria in Thrace, who was the *tutor*, and not the disciple, of Hippocrates. Prodicus of Selymbria does not appear to be known.

[7] "Healing by ointments," or, as we should call it at the present day, "The Friction cure."

[8] "Mediastinis."

Chrysippus, by Erasistratus, son[9] of the daughter of Aristotle. For the cure of King Antiochus—to give our first illustration of the profits realized by the medical art—Erasistratus received from his son, King Ptolemæus, the sum of one hundred talents.

### CHAP. 4.—THE EMPIRIC BRANCH OF MEDICINE.

Another sect again, known as that of the Empirics[10]—because it based its rules upon the results of experiment—took its rise in Sicily, having for its founder Acron of Agrigentum, a man recommended by the high authority of Empedocles[11] the physician.

### CHAP. 5. — PARTICULARS RELATIVE TO HEROPHILUS AND OTHER CELEBRATED PHYSICIANS. THE VARIOUS CHANGES THAT HAVE BEEN MADE IN THE SYSTEM OF MEDICINE.

These several schools of medicine, long at variance among themselves, were all of them condemned by Herophilus,[12] who regulated the arterial pulsation according to the musical[13] scale, correspondingly with the age of the patient. In succeeding years again, the theories of this sect were abandoned, it being found that to belong to it necessitated an acquaintance with literature. Changes, too, were effected in the school, of which, as already[13*] stated, Asclepiades had become the founder. His disciple, Themison,[14] who at first in his writings implicitly followed him, soon afterwards, in compliance with the growing degeneracy of the age, went so far as to modify his own methods of treatment; which, in their turn, were entirely displaced, with the authorization of the late Emperor Augustus, by Antonius Musa,[15] a physician who had rescued that prince

[9] Pythias, the daughter of Aristotle, was his stepmother, and adopted him. His mother's name was Cretoxena.

[10] Or "Sect of Experimentalists." They based their practice upon experience derived from the observation of facts. The word "Empiric" is used only in a bad sense at the present day. For an account of Hippocrates, see end of B. vii.; of Chrysippus, see end of B. xx.; and of Erasistratus, see end of B. xi.

[11] See end of B. xi.

[12] See end of B. xi.

[13] See B. xi. c. 88. The Chinese, Ajasson remarks, apply the musical scale to the pulsation; it being a belief of the Mandarins that the body is a musical instrument, and that to be in health it must be kept in tune.

[13*] In B. xxvi. cc. 7, 8.

[14] See end of B. xi.

[15] See B. xix. c. 38.

from a most dangerous malady, by following a mode of treatment diametrically opposite.

I pass over in silence many physicians of the very highest celebrity, the Cassii, for instance, the Calpetani, the Arruntii, and the Rubrii, men who received fees yearly from the great, amounting to no less than two hundred and fifty thousand sesterces. As for Q. Stertinius, he thought that he conferred an obligation upon the emperors in being content with five hundred thousand[16] sesterces per annum; and indeed he proved, by an enumeration of the several houses, that a city practice would bring him in a yearly income of not less than six hundred thousand sesterces.

Fully equal to this was the sum lavished upon his brother by Claudius Cæsar; and the two brothers, although they had drawn largely upon their fortunes in beautifying the public buildings at Neapolis, left to their heirs no less than thirty millions of sesterces![17] such an estate as no physician but Arruntius had till then possessed.

Next in succession arose Vettius Valens, rendered so notorious by his adulterous connection[18] with Messalina, the wife of Claudius Cæsar, and equally celebrated as a professor of eloquence. When established in public favour, he became the founder of a new sect.

It was in the same age, too, during the reign of the Emperor Nero, that the destinies of the medical art passed into the hands of Thessalus,[19] a man who swept away all the precepts of his predecessors, and declaimed with a sort of frenzy against the physicians of every age; but with what discretion and in what spirit, we may abundantly conclude from a single trait presented by his character—upon his tomb, which is still to be seen on the Appian Way, he had his name inscribed as the "Iatronices"—the "Conqueror of the Physicians." No stage-player, no driver of a three-horse chariot, had a greater throng attending him when he appeared in public: but he was at last eclipsed in credit by Crinas, a native of Massilia, who, to wear an appearance of greater discreetness and more devoutness, united in himself the pursuit of two sciences, and

[16] Rather more than £4400.

[17] More than £265,000.

[18] For which he was put to death A.D. 48.

[19] A native of Tralles in Lydia, and the son of a weaver there. Galen mentions him in terms of contempt and ridicule.

prescribed diets to his patients in accordance with the movements of the heavenly bodies, as indicated by the almanacks of the mathematicians, taking observations himself of the various times and seasons. It was but recently that he died, leaving ten millions of sesterces, after having expended hardly a less sum upon building the walls of his native place and of other towns.

It was while these men were ruling our destinies, that all at once, Charmis, a native also of Massilia, took[20] the City by surprise. Not content with condemning the practice of preceding physicians, he proscribed the use of warm baths as well, and persuaded people, in the very depth of winter even, to immerse themselves in cold water. His patients he used to plunge into large vessels filled with cold water, and it was a common thing to see aged men of consular rank make it a matter of parade to freeze themselves; a method of treatment, in favour of which Annæus[21] Seneca gives his personal testimony, in writings still extant.

There can be no doubt whatever, that all these men, in the pursuit of celebrity by the introduction of some novelty or other, made purchase of it at the downright expense of human life. Hence those woeful discussions, those consultations at the bedside of the patient, where no one thinks fit to be of the same opinion as another, lest he may have the appearance of being subordinate to another; hence, too, that ominous inscription to be read upon a tomb, "It was the multitude of physicians that killed me."[22]

The medical art, so often modified and renewed as it has been, is still on the change from day to day, and still are we impelled onwards by the puffs[23] which emanate from the ingenuity of the Greeks. It is quite evident too, that every one among them that finds himself skilled in the art of speech, may forthwith create himself the arbiter of our life and death: as though, forsooth, there were not thousands[24] of nations who

[20] "Invasit."

[21] Ep. 53 and 83. His "adstipulatio" is of a very equivocal character, however.

[22] "Turbâ medicorum perii." This is supposed to be borrowed from a line of Menander—

Πολλῶν ἰατρῶν ἔισοδος μ' ἀπώλεσεν.

[23] "Flatu."

[24] Herodotus states this with reference to the Babylonians; Strabo, the

live without any physicians at all, though not, for all that, without the aid of medicine. Such, for instance, was the Roman[25] people, for a period of more than six hundred years; a people, too, which has never shown itself slow to adopt all useful arts, and which even welcomed the medical art with avidity, until, after a fair experience of it, there was found good reason to condemn it.

### CHAP. 6.—WHO FIRST PRACTISED AS A PHYSICIAN AT ROME, AND AT WHAT PERIOD.

And, indeed, it appears to me not amiss to take the present opportunity of reviewing some remarkable facts in the days of our forefathers connected with this subject. Cassius Hemina,[26] one of our most ancient writers, says that the first physician that visited Rome was Archagathus, the son of Lysanias, who came over from Peloponnesus, in the year of the City 535, L. Æmilius and M. Livius being consuls. He states also, that the right of free citizenship[27] was granted him, and that he had a shop[28] provided for his practice at the public expense in the Acilian Cross-way;[29] that from his practice he received the name of "Vulnerarius;"[30] that on his arrival he was greatly welcomed at first, but that soon afterwards, from the cruelty displayed by him in cutting and searing his patients, he acquired the new name of "Carnifex,"[31] and brought his art and physicians in general into considerable disrepute.

That such was the fact, we may readily understand from the words of M. Cato, a man whose authority stands so high of itself, that but little weight is added to it by the triumph[32] which he gained, and the Censorship which he held. I shall, therefore, give his own words in reference to this subject.

### CHAP. 7.—THE OPINIONS ENTERTAINED BY THE ROMANS ON THE ANCIENT PHYSICIANS.

"Concerning those Greeks, son Marcus, I will speak to you

Bastitani, a people of Spain; and Eusebius, the more ancient inhabitants of Spain.

[25] See B. xx. c. 33.

[26] See end of B. xii.

[27] "Jus Quiritium."

[28] "Tabernam." A surgery, in fact, the same as the "iatreion" of the Greeks.

[29] Or "carrefour"—"compitum." The Acilian *Gens* pretended to be under the especial tutelage of the gods of medicine.

[30] The "Wound-curer," from "vulnus," a wound.

[31] "Executioner," or "hangman."

[32] For his conquests in Spain.

more at length on the befitting occasion. I will show you the results of my own experience at Athens, and that, while it is a good plan to dip into their literature,[33] it is not worth while to make a thorough acquaintance with it. They are a most iniquitous and intractable race, and you may take my word as the word of a prophet, when I tell you, that whenever that nation shall bestow its literature upon Rome it will mar everything; and that all the sooner, if it sends its physicians among us. They have conspired among themselves to murder all barbarians with their medicine; a profession which they exercise for lucre, in order that they may win our confidence,[34] and dispatch us all the more easily. They are in the common habit, too, of calling us barbarians, and stigmatize us beyond all other nations, by giving us the abominable appellation of Opici.[35] I forbid you to have anything to do with physicians."

CHAP. 8.—EVILS ATTENDANT UPON THE PRACTICE OF MEDICINE.

Cato, who wrote to this effect, died in his eighty-fifth year, in the year of the City 605; so that no one is to suppose that he had not sufficient time to form his experience, either with reference to the duration of the republic, or the length of his own life. Well then—are we to conclude that he has stamped with condemnation a thing that in itself is most useful? Far from it, by Hercules! for he subjoins an account of the medical prescriptions, by the aid of which he had ensured to himself and to his wife a ripe old age; prescriptions[36] upon which we are now about to enlarge. He asserts also that he has a book of recipes in his possession, by the aid of which he treats the maladies of his son, his servants, and his friends; a book from which we have extracted the various prescriptions according to the several maladies for which they are employed.

It was not the thing itself that the ancients condemned, but it was the art as then practised, and they were shocked, more particularly, that man should pay so dear for the enjoyment of life. For this reason it was, they say, that the Temple of

[33] "Illorum literas inspicere."

[34] On the principle that that which costs money *must* be worth having.

[35] The Opici or Osci were an ancient tribe of Italy, settled in Campania, Latium, and Samnium. From their uncivilized habits the name was long used as a reproachful epithet, equivalent to our words "bumpkin," "clod-hopper," or "chawbacon."

[36] Marked by their supereminent absurdity, as Fée remarks.

Æsculapius, even after he was received as a divinity, was built without the City, and afterwards on an island;[37] for this reason, too, it was, that when, long after the time of Cato, the Greeks were expelled from Italy, the physicians were not[38] exempted from the decree. And here I will[39] improve upon the foresight displayed by them. Medicine is the only one of the arts of Greece, that, lucrative as it is, the Roman gravity has hitherto refused to cultivate. It is but very few of our fellow-citizens that have even attempted it, and so soon as ever they have done so, they have become deserters to the Greeks forthwith.[40] Nay, even more than this, if they attempt to treat of it in any other language than Greek, they are sure to lose all credit, with the most ignorant even, and those who do not understand a word of Greek; there being all the less confidence felt by our people in that which so nearly concerns their welfare, if it happens to be intelligible to them. In fact, this is the only one of all the arts, by Hercules! in which the moment a man declares[41] himself to be an adept, he is at once believed, there being at the same time no imposture, the results of which are more fraught with peril. To all this, however, we give no attention, so seductive is the sweet influence of the hope entertained of his ultimate recovery by each.

And then besides, there is no law in existence whereby to punish the ignorance of physicians, no instance before us of capital punishment inflicted. It is at the expense of our perils that they learn, and they experimentalize by putting us to death, a physician being the only person that can kill another with sovereign impunity. Nay, even more than this, all the blame is thrown upon the sick man only; he is accused of disobedience forthwith, and it is the person who is dead and gone that is put upon his trial. It is the usage at Rome for the decuries[42] to pass examination under the censorship of the

[37] Formed by the river Tiber. See the Quæst. Rom. of Plutarch, on this subject.

[38] We have adopted Sillig's suggestion, and read "nec" for "et" here. The meaning, however, is very doubtful.

[39] "Augebo providentiam illorum." The meaning of this passage also is doubtful.

[40] By adopting that language instead of the Latin; Sextius Niger, for instance.

[41] Diplomas seem to have been less cared for in those times than at the present day even, when quackery has so free a range.

[42] See B. iii. c. 26, and B. xxxiii. cc. 7, 8.

emperor, and for inquisitions to be made at our party-walls[43] even: persons who are to sit in judgment on our monetary matters are sent for to Gades[44] and the very Pillars of Hercules; while a question of exile is never entertained without a panel of forty-five men selected for the purpose.[45] But when it is the judge's own life that is at stake, who are the persons that are to hold council upon it, but those who the very next moment are about to take it!

And yet so it is, that we only meet with our deserts, no one of us feeling the least anxiety to know what is necessary for his own welfare. We walk[46] with the feet of other people, we see with the eyes of other people, trusting to the memory of others we salute one another, and it is by the aid of others that we live. The most precious objects of existence, and the chief supports[47] of life, are entirely lost to us, and we have nothing left but our pleasures to call our own. I will not leave Cato exposed to the hatred of a profession so ambitious as this, nor yet that senate which judged as he did, but at the same time I will pursue my object without wresting to my purpose the crimes practised by its adepts, as some might naturally expect. For what profession has there been more fruitful in poisonings, or from which there have emanated more frauds upon wills? And then, too, what adulteries have been committed, in the very houses of our princes even! the intrigue of Eudemus,[48] for example, with Livia, the wife of Drusus Cæsar, and that of Valens with the royal lady previously mentioned.[49] Let us not impute these evils, I say, to the art, but to the men who practise it; for Cato, I verily believe, as little apprehended

[43] "Inquisitio per parietes." The reading is doubtful, but he not improbably alludes to the employment of spies.

[44] Hardouin thinks that he alludes to Cornelius Balbus here, a native of Gades. See B. v. c. 5, and B. vii. 44.

[45] "Electis viris datur tabula." He alludes to the three tablets delivered to the Judices, one of which had inscribed on it "Acquitted," another "Not proven," and a third "Guilty"—*Absolvatur*, *Non liquet*, and *Condemno*.

[46] "In this place he casteth in the Romans' teeth, their *Lecticarii*, *Anagnostæ*, and *Nomenclatores*."—*Holland*. Letter-bearers, readers, and prompters as to the names of the persons addressed.

[47] He alludes to the resources of medicine.

[48] A physician at Rome, who was afterwards put to the torture for this crime. Livia was the daughter of Drusus Nero, the brother of Tiberius.

[49] Messalina, mentioned in c. 5 of this Book.

such practices as these in the City, as he did the presence of royal ladies[50] there.

I will not accuse the medical art of the avarice even of its professors, the rapacious bargains made with their patients while their fate is trembling in the balance, the tariffs framed upon their agonies, the monies taken as earnest for the dispatching of patients, or the mysterious secrets of the craft. I will not mention how that cataract must be couched[51] only, in the eye, in preference to extracting it at once—practices, all of them, which have resulted in one very great advantage, by alluring hither such a multitude of adventurers; it being no moderation on their part, but the rivalry existing between such numbers of practitioners, that keeps their charges within moderation. It is a well-known fact that Charmis, the physician[52] already mentioned, made a bargain with a patient of his in the provinces, that he should have two hundred thousand sesterces for the cure; that the Emperor Claudius extorted from Alcon, the surgeon,[53] ten millions of sesterces by way of fine; and that the same man, after being recalled from his exile in Gaul, acquired a sum equally large in the course of a few years.

These are faults, however, which must be imputed to individuals only; and it is not my intention to waste reproof upon the dregs of the medical profession, or to call attention to the ignorance displayed by that crew,[54] the violation of all regimen in their treatment of disease, the evasions practised in the use of warm baths, the strict diet they imperiously prescribe, the food that is crammed into these same patients, exhausted as they are, several times a day; together with a thousand other methods of showing how quick they are to change their mind, their precepts for the regulation of the kitchen, and their recipes for the composition of unguents, it being one grand object with them to lose sight of none of the usual incitements to sensuality. The importation of foreign merchandize, and the introduction of tariffs settled by foreigners,[55] would have been highly displeasing to our ances-

[50] Nothing could possibly be more remote from his republican notions, than "reginæ" at Rome.

[51] "Emovendam." In order that a future job may be ensured.

[52] In c. 5 of this Book.

[53] "Vulnerum medico."

[54] "Ejus turbæ."

[55] See B. xxiv. c. 1.

tors, I can readily imagine; but it was not these inconveniences that Cato had in view, when he spoke thus strongly in condemnation of the medical art.

"Theriace"[56] is the name given to a preparation devised by luxury; a composition formed of six hundred[57] different ingredients; and this while Nature has bestowed upon us such numbers of remedies, each of which would have fully answered the purpose employed by itself! The Mithridatic[58] antidote is composed of four and fifty ingredients, none of which are used in exactly the same proportion, and the quantity prescribed is in some cases so small as the sixtieth part of one denarius! Which of the gods, pray, can have instructed man in such trickery as this, a height to which the mere subtlety of human invention could surely never have reached? It clearly must emanate from a vain ostentation of scientific skill, and must be set down as a monstrous system of puffing off the medical art.

And yet, after all, the physicians themselves do not understand this branch of their profession; and I have ascertained that it is a common thing for them to put mineral vermilion[59] in their medicines, a rank poison, as I shall have occasion[60] to show when I come to speak of the pigments, in place of Indian cinnabar, and all because they mistake the name of the one drug for that of the other! These, however, are errors which only concern the health of individuals, while it is the practices which Cato foresaw and dreaded, less dangerous in themselves and little regarded, practices, in fact, which the leading men in the art do not hesitate to avow, that have wrought[61] the corruption of the manners of our empire.

The practices I allude to are those to which, while enjoying robust health, we submit: such, for instance, as rubbing the body with wax and oil,[62] a preparation for a wrestling match, by rights, but which, these men pretend, was invented as a preservative of health; the use of hot baths, which are necessary,

[56] The origin of our word "treacle." See B. xx. c. 100, and Note 97.
[57] Used as a round number, like our expression "ten thousand."
[58] See B. xxiii. c. 77, and B. xxv. c. 26.
[59] "Minium." This red lead had the name of "cinnabaris nativa," whence the error.
[60] In B. xxxiii. c. 38.
[61] As tending to effeminacy, or undermining the constitution.
[62] See B. xxviii. c. 13.

they have persuaded us, for the proper digestion of the food, baths which no one ever leaves without being all the weaker for it, and from which the more submissive of their patients are only carried to the tomb; potions taken fasting; vomits to clear the stomach, and then a series of fresh drenchings with drink; emasculation, self-inflicted by the use of pitch-plasters as depilatories; the public exposure, too, of even the most delicate parts of the female body for the prosecution of these practices. Most assuredly so it is, the contagion which has seized upon the public morals, has had no more fertile source than the medical art, and it continues, day by day even, to justify the claims of Cato to be considered a prophet and an oracle of wisdom, in that assertion of his, that it is quite sufficient to dip into the records of Greek genius, without becoming thoroughly acquainted with them.

Such then is what may be said in justification of the senate and of the Roman people, during that period of six hundred years in which they manifested such repugnance to an art, by the most insidious terms of which, good men are made to lend their credit and authority to the very worst, and so strongly entered their protest against the silly persuasions entertained by those, who fancy that nothing can benefit them but what is coupled with high price.

I entertain no doubt, too, that there will be found some to express their disgust at the particulars which I am about to give, in relation to animals: and yet Virgil himself has not disdained —when, too, there was no necessity for his doing so—to speak of ants and weevils,

"And nests by beetles made that shun the light."[63]

Homer,[64] too, amid his description of the battles of the gods, has not disdained to remark upon the voracity of the common fly; nor has Nature, she who engendered man, thought it beneath her to engender these insects as well. Let each then make it his care, not so much to regard the thing itself, as to rightly appreciate in each case the cause and its effects.

## CHAP. 9.—THIRTY-FIVE REMEDIES DERIVED FROM WOOL.

I shall begin then with some remedies that are well known,

[63] "Lucifugis congesta cubilia blattis." Georg. I. 184, IV. 243.
[64] Il. xvii. 570, *et seq.*

those namely, which are derived from wool and from the eggs of birds, thus giving due honour to those substances which hold the principal place in the estimation of mankind; though at the same time I shall be necessitated to speak of some others out of their proper place, according as occasion may offer. I should not have been at a loss for high-flown language with which to grace my narrative, had I made it my design to regard anything else than what, as being strictly trustworthy,[65] becomes my work: for among the very first remedies mentioned, we find those said to be derived from the ashes and nest of the phœnix,[66] as though, forsooth, its existence were a well ascertained fact, and not altogether a fable. And then besides, it would be a mere mockery to describe remedies that can only return to us once in a thousand years.

(2.) The ancient Romans attributed to wool a degree of religious importance even, and it was in this spirit that they enjoined that the bride should touch the door-posts of her husband's house with wool. In addition to dress and protection from the cold, wool, in an unwashed state, used in combination with oil, and wine or vinegar, supplies us with numerous remedies, according as we stand in need of an emollient or an excitant, an astringent or a laxative. Wetted from time to time with these liquids, greasy wool is applied to sprained limbs, and to sinews that are suffering from pain. In the case of sprains, some persons are in the habit of adding salt, while others, again, apply pounded rue and grease, in wool: the same, too, in the case of contusions or tumours. Wool will improve the breath, it is said, if the teeth and gums are rubbed with it, mixed with honey; it is very good, too, for phrenitis,[67] used as a fumigation. To arrest bleeding at the nose, wool is introduced into the nostrils with oil of roses; or it is used in another manner, the ears being well plugged with it. In the case of inveterate ulcers it is applied topically with honey: soaked in wine or vinegar, or in cold water and oil, and then squeezed out, it is used for the cure of wounds.

Rams' wool, washed in cold water, and steeped in oil, is used for female complaints, and to allay inflammations of the uterus. Procidence of the uterus is reduced by using this wool

[65] He certainly does not *always* keep this object in view.

[66] See B. x. c. 2, and B. xii. c. 42.

[67] A form of fever, Littré remarks, that is known by the moderns as "pseudo-continuous."

in the form of a fumigation. Greasy wool, used as a plaster and as a pessary, brings away the dead fœtus, and arrests uterine discharges. Bites inflicted by a mad dog are plugged with unwashed wool, the application being removed at the end of seven days. Applied with cold water, it is a cure for agnails: steeped in a mixture of boiling nitre, sulphur, oil, vinegar, and tar, and applied twice a day, as warm as possible, it allays pains in the loins. By making ligatures with unwashed rams' wool about the extremities of the limbs, bleeding is effectually stopped.

In all cases, the wool most esteemed is that from the neck of the animal; the best kinds of wool being those of Galatia, Tarentum, Attica, and Miletus. For excoriations, blows, bruises, contusions, crushes, galls, falls, pains in the head and other parts, and for inflammation of the stomach, unwashed wool is applied, with a mixture of vinegar and oil of roses. Reduced to ashes, it is applied to contusions, wounds, and burns, and forms an ingredient in ophthalmic compositions. It is employed, also, for fistulas and suppurations of the ears. For this last purpose, some persons take the wool as it is shorn, while others pluck it from the fleece; they then cut off the ends of it, and after drying and carding it, lay it in pots of unbaked earth, steep it well in honey, and burn it. Others, again, arrange it in layers alternately with chips of torch-pine,[68] and, after sprinkling it with oil, set fire to it: they then rub the ashes into small vessels with the hands, and let them settle in water there. This operation is repeated and the water changed several times, until at last the ashes are found to be slightly astringent, without the slightest pungency; upon which, they are put by for use, being possessed of certain caustic properties,[69] and extremely useful as a detergent for the eyelids.

### CHAP. 10.—THIRTY-TWO REMEDIES DERIVED FROM WOOL-GREASE.

And not only this, but the filthy excretions even of sheep, the sweat adhering to the wool of the flanks and of the axillary concavities—a substance known as "œsypum"[70]—are

[68] See B. xvi. c. 19.

[69] "Smectica" is suggested by Gesner, Hist. Anim., as a better reading than "septica."

[70] "Œsypum" is often mentioned by Ovid as a favourite cosmetic with the Roman ladies.

applied to purposes almost innumerable; the grease produced by the sheep of Attica being the most highly esteemed. There are numerous ways of obtaining it, but the most approved method is to take the wool, fresh clipped from those parts of the body, or else the sweat and grease collected from any part of the fleece, and boil it gently in a copper vessel upon a slow fire: this done, it is left to cool, and the fat which floats upon the surface collected into an earthen vessel. The material originally used is then subjected to another boiling, and the two results are washed in cold water; after which, they are strained through a linen cloth and exposed to the sun till they become bleached and quite transparent, and are then put by in a pewter box for keeping.

The best proof of its genuineness is its retention of the strong smell of the original grease, and its not melting when rubbed with water upon the hand, but turning white, like white-lead in appearance. This substance is extremely useful for inflammations of the eyes and indurations of the eyelids. Some persons bake the wool in an earthen pot, until it has lost all its grease, and are of opinion that, prepared this way, it is a more useful remedy for excoriations and indurations of the eyelids, for eruptions at the corners of the eyes, and for watery eyes. And not only does this grease heal ulcerations of the eyes, but, mixed with goose-grease, of the ears and generative organs as well; in combination also with melilote and butter, it is a cure for inflammations of the uterus, and for excoriations of the rectum and condylomata. The other uses to which it is applied, we shall detail on a more appropriate occasion.

The grease, too, of the wool about the tail is made up into pills, unmixed with any substance: these pills are dried and pulverized, being an excellent application for the teeth, when loose even, and for the gums, when attacked by spreading ulcers of a cancerous nature. Sheep's wool, too, cleaned, is applied by itself, or with the addition of sulphur, for dull, heavy pains, and the ashes of it, burnt, are used for diseases of the generative organs: indeed, this wool is possessed of such sovereign virtues, that it is used as a covering for medicinal applications even. It is also an especial remedy for the sheep itself, when it has lost its stomach, and refuses to feed; for, upon plucking some wool from the tail, and then tying the tail therewith, as

tight as possible, the sheep will fall to feeding immediately. It is said, however, that the part of the tail which lies beyond the knot so made will quickly mortify and die.

CHAP. 11. (3.)—TWENTY-TWO REMEDIES DERIVED FROM EGGS.

There is a considerable affinity also between wool and eggs, which are applied together as a frontal to the forehead by way of cure for defluxions of the eyes. Wool, however, is not required for this purpose to have been dressed with radicula,[71] the only thing requisite to be combined with it being the white of an egg and powdered frankincense. The white of an egg, also applied by itself, arrests defluxions of the eyes, and has a cooling effect upon inflammations of those organs: some, however, prefer mixing saffron with it, and employ it as an ingredient in eye-salves, in place of water. For ophthalmia in infants there is hardly any remedy to be found, except white of egg mixed with fresh butter. Eggs beaten up with oil, are very soothing for erysipelas, beet leaves being laid on the liniment.

White of egg, mixed with pounded gum ammoniac, is used as a bandoline for arranging the hairs of the eyelids; and, in combination with pine-nuts and a little honey, it forms a liniment for the removal of pimples on the face. If the face is well rubbed with it, it will never be sun-burnt. If, the moment the flesh has been scalded, an egg is applied, no blisters will form: some persons, however, mix with it barley-meal and a little salt. In cases of ulceration formed by burns, there is nothing better than parched barley and hogs' lard, mixed with the white of an egg. The same mixture is also used as an application for diseases of the rectum, in infants even, and in cases, too, when there is procidence of those parts. For the cure of chaps upon the feet, white of eggs is boiled, with two denarii of white lead, an equal quantity of litharge, a little myrrh, and some wine. For the cure of erysipelas they use the whites of three eggs with amylum:[72] it is said, too, that white of egg has the effect of knitting wounds and of expelling urinary calculi. The yolk of eggs boiled hard, applied in woman's milk with a little saffron and honey, has a soothing effect upon pains in the eyes. The yolk is applied also to the eyes in wool, mixed with honied wine and oil of

[71] See B. xix. c. 1, B. xxiv. c. 58, and B. xxv. c. 21.

[72] See B. xviii. c. 17.

roses; or else mixed with ground parsley-seed and polenta, and applied with honied wine. The yolk of a single egg, swallowed raw by itself without being allowed to touch the teeth, is remarkably good for cough, defluxions of the chest, and irritations of the fauces. It is used, too, both internally and externally, in a raw state, as a sovereign cure for the sting of the hæmorrhoïs;[73] and it is highly beneficial for the kidneys, for irritations and ulcerations of the bladder, and for bloody expectorations. For dysentery, the yolks of five eggs are taken raw in one semi-sextarius of wine, mixed with the ashes of the shells, poppy-juice, and wine.

For cœliac fluxes, it is recommended to take the yolks of eggs, with like proportions of pulpy raisins and pomegranate rind, in equal quantities, for three consecutive days; or else to follow another method, and take the yolks of three eggs, with three ounces of old bacon and honey, and three cyathi of old wine; the whole being beaten up to the consistency of honey, and taken in water, when needed, in pieces the size of a hazel nut. In some cases, too, the yolks of three eggs are fried in oil, the whole of the egg having been steeped a day previously in vinegar. It is in this way that eggs are used for the treatment of spleen diseases; but for spitting of blood, they should be taken with three cyathi of must. Yolk of egg is used, too, for the cure of bruises of long standing, in combination with bulbs and honey. Boiled and taken in wine, yolks of eggs arrest menstruation: applied raw with oil or wine, they dispel inflations of the uterus. Mixed with goose-grease and oil of roses, they are useful for crick in the neck; and they are hardened over the fire, and applied warm, for the cure of maladies of the rectum. For condylomata, eggs are used in combination with oil of roses; and for the treatment of burns, they are hardened in water, and set upon hot coals till the shells are burnt, the yellow being used as a liniment with oil of roses.

Eggs become entirely transformed into yolk, on being removed after the hen has sat upon them for three days; in which state they are known by the name of "sitista."[74] The chicks that are found within the shell are used for strengthen-

[73] See B. xx. c. 23.

[74] Hermolaüs suggests "schista," "divided," and Dalechamps proposes "synchyta," "mixed." The reading is very doubtful.

ing a disordered stomach, being eaten with half a nut-gall, and no other food taken for the next two hours. They are given also for dysentery, boiled in the egg with one semi-sextarius of astringent wine, and an equal quantity of olive oil and polenta. The pellicle that lines the shell is used, either raw or boiled, for the cure of cracked lips; and the shell itself, reduced to ashes, is taken in wine for discharges of blood: care must be taken, however, to burn it without the pellicle. In the same way, too, a dentifrice is prepared. The ashes of the shell, applied topically with myrrh, arrest menstruation when in excess. So remarkably strong is the shell of an egg, that if it is set upright, no force or weight can break it, unless a slight inclination be made to one side or other of the circumference. Eggs taken whole in wine, with rue, dill, and cummin, facilitate parturition. Used with oil and cedar-resin, they remove itch and prurigo, and, applied in combination with cyclaminos,[75] they are remedial for running ulcers of the head. For purulent expectorations and spitting of blood, a raw egg is taken, warmed with juice of cut-leek and an equal quantity of Greek honey. For coughs, eggs are administered, boiled and beaten up with honey, or else raw, with raisin wine and an equal quantity of olive oil. For diseases of the male organs, an injection is made, of an egg, three cyathi of raisin wine, and half an ounce of amylum,[76] the mixture being used immediately after the bath. Where injuries have been inflicted by serpents, boiled eggs are used as a liniment, beaten up with nasturtium.

In what various ways eggs are used as food is well known to all, passing downwards, however swollen the throat may be, and warming the parts as they pass. Eggs, too, are the only diet which, while it affords nutriment in sickness, does not load the stomach, possessing at the same moment all the advantages both of food and drink. We have already[77] stated, that the shell of an egg becomes soft when steeped in vinegar: it is by the aid of eggs thus prepared, and kneaded up with meal into bread, that patients suffering from the cœliac flux are often restored to strength. Some, however, think it a better plan to roast the eggs, when thus softened, in a shallow pan; a method, by the aid of which, they arrest not only looseness of

[75] Or Sowbread. See B. xxv. c. 67.
[76] See B. xviii. c. 17.
[77] In B. x. c. 80.

the bowels, but excessive menstruation as well. In cases, again, where the discharges are greatly in excess, eggs are taken raw, with meal, in water. The yolks, too, are employed alone, boiled hard in vinegar and roasted with ground pepper, when wanted to arrest diarrhœa.

For dysentery, there is a sovereign remedy, prepared in the following manner: an egg is emptied into a new earthen vessel, which done, in order that all the proportions may be equal, fill the shell, first with honey, then with oil, and then with vinegar; beat them up together, and thoroughly incorporate them: the better the quality of the several ingredients, the more efficacious the mixture will be. Others, again, instead of oil and vinegar, use the same proportions of red resin and wine. There is also another way of making up this preparation: the proportion of oil, and of that only, remains the same, and to it they add two sixtieth parts of a denarius of the vegetable which we have spoken of under the name of "rhus,"[78] and five oboli of honey. All these ingredients are boiled down together, and no food is eaten by the patient till the end of four hours after taking the mixture. Many persons, too, have a cure for griping pains in the bowels, by beating up two eggs with four cloves of garlick, and administering them, warmed in one semi-sextarius of wine.

Not to omit anything in commendation of eggs, I would here add that glair of egg, mixed with quicklime, unites broken[79] glass. Indeed, so great is the efficacy of the substance of an egg, that wood dipped in it will not take fire, and cloth with which it has come in contact will not ignite.[80] On this occasion, however, it is only of the eggs of poultry that I have been speaking, though those of the various other birds as well are possessed of many useful properties, as I shall have to mention on the appropriate occasions.

### CHAP. 12.—SERPENTS' EGGS.

In addition to the above, there is another kind of egg,[81] held

[78] See B. xxiv. c. 54.

[79] This is the fact, and it is similarly used for mending china. White of egg, mixed with whiskey or spirits of wine, will answer the purpose equally well.

[80] Ajasson remarks that there is some slight truth in this assertion.

[81] Pliny alludes here to the beads or rings of glass which were used by the Druids as charms to impose on the credulity of their devotees, under

in high renown by the people of the Gallic provinces, but totally omitted by the Greek writers. In summer[82] time, numberless snakes become artificially entwined together, and form rings around their bodies with the viscous slime which exudes from their mouths, and with the foam secreted by them: the name given to this substance is "anguinum."[83] The Druids tell us, that the serpents eject these eggs into the air by their hissing,[84] and that a person must be ready to catch them in a cloak, so as not to let them touch the ground; they say also that he must instantly take to flight on horseback, as the serpents will be sure to pursue him, until some intervening river has placed a barrier between them. The test of its genuineness, they say, is its floating against the current of a stream, even though it be set in gold. But, as it is the way with magicians to be dexterous and cunning in casting a veil about their frauds, they pretend that these eggs can only be taken on a certain day of the moon; as though, forsooth, it depended entirely upon the human will to make the moon and the serpents accord as to the moment of this operation.

I myself, however, have seen one of these eggs: it was round, and about as large as an apple of moderate size; the shell[85] of it was formed of a cartilaginous substance, and it was surrounded with numerous cupules, as it were, resembling those upon the arms of the polypus: it is held in high estimation

the name of *Glain naidr*, or "the Adder gem." Mr. Luyd (in Rowland's Mona Antiqua, p. 342) says that the genuine *Ovum anguinum* can be no other than a shell of the kind called *echinus marinus*, and that Dr. Borlase observes that, instead of the natural *anguinum*, artificial rings of stone, glass, and sometimes baked clay, were substituted as of equal validity. The belief in these charms very recently existed in Cornwall and Wales, if indeed it does not at the present day. The subject is very fully discussed in Brand's *Popular Antiquities*, Vol. III. p. 286, *et seq.*, and p. 369, *et seq.*, *Bohn's Edition*. These gems and beads are not uncommonly found in tumuli of the early British period.

[82] A similar belief in its origin was prevalent in Cornwall and Wales, and whoever found it was supposed to ensure success in all his undertakings.

[83] "The snake's egg"—*ovum* being understood.

[84] "The vulgar opinion in Cornwall and most parts of Wales is that these are produced through all Cornwall by snakes joining their heads together and hissing, which forms a kind of bubble like a ring about the head of one of them, which the rest, by continual hissing, blow on till it comes off at the tail, when it immediately hardens and resembles a glass ring."—*Gough's Camden*, Vol. II. p. 571, Ed. 1789.

[85] The shell of a sea urchin most probably. See Note 81 above.

among the Druids. The possession of it is marvellously vaunted as ensuring success[86] in law-suits, and a favourable reception with princes; a notion which has been so far belied, that a Roman of equestrian rank, a native of the territory of the Vocontii,[87] who, during a trial, had one of these eggs in his bosom, was slain by the late Emperor Tiberius, and for no other reason, that I know of, but because he was in possession of it. It is this entwining of serpents with one another, and the fruitful results of this unison, that seem to me to have given rise to the usage among foreign nations, of surrounding the caduceus[88] with representations of serpents, as so many symbols of peace—it must be remembered, too, that on the caduceus, serpents are never[89] represented as having crests.

CHAP. 13.—THE METHOD OF PREPARING COMMAGENUM. FOUR REMEDIES DERIVED FROM IT.

Having to make mention, in the present Book, of the eggs of the goose and the numerous uses to which they are applied, as also of the bird itself, it is our duty to award the honour to Commagene[90] of a most celebrated preparation there made. This composition is prepared from goose-grease, a substance applied to many other well-known uses as well; but in the case of that which comes from Commagene, a part of Syria, the grease is first incorporated with cinnamon, cassia,[91] white pepper, and the plant called "commagene,"[92] and then placed in vessels and buried in the snow. The mixture has an agreeable smell, and is found extremely useful for cold shiverings, convulsions, heavy or sudden pains, and all those affections, in fact, which are treated with the class of remedies known as "acopa;"[93] being equally an unguent and a medicament.

There is another method, also, of preparing it in Syria: the fat of the bird is preserved in manner already[94] described, and

[86] See Note 82 above.

[87] A nation of Gaul. See B. iii. cc. 5, 21.

[88] The wand held by heralds, and generally represented as being carried by Mercury in his character of messenger of the gods.

[89] And therefore not portentous of war.

[90] See B. v. cc. 13, 20.

[91] See B. xii. c. 43.

[92] See B. x. c. 28. Generally supposed to be Syrian nard; though some identify it with the *Comacum* of Theophrastus.

[93] See B. xxiii. cc. 45, 80.

[94] In B. xxviii. c. 38.

there is added to it erysisceptrum,[95] xylobalsamum,[96] palm elate,[97] and calamus, each in the same proportion as the grease; the whole being gently boiled some two or three times in wine. This preparation is made in winter, as in summer it will never thicken, except with the addition of wax. There are numerous other remedies, also, derived from the goose, as well as from the raven;[98] a thing I am much surprised at, seeing that both the goose and the raven[99] are generally said to be in a diseased state at the end of summer and the beginning of autumn.

### CHAP. 14. (4.)—REMEDIES DERIVED FROM THE DOG.

We have already[1] spoken of the honours earned by the geese, when the Gauls were detected in their attempt to scale the Capitol. It is for a corresponding reason, also, that punishment is yearly inflicted upon the dogs, by crucifying them alive upon a gibbet of elder, between the Temple of Juventas[2] and that of Summanus.[3]

In reference to this last-mentioned animal, the usages of our forefathers compel us to enter into some further details. They considered the flesh of sucking whelps to be so pure a meat, that they were in the habit of using them as victims even in their expiatory sacrifices. A young whelp, too, is sacrificed to Genita Mana;[4] and, at the repasts celebrated in honour of the gods, it is still the usage to set whelps' flesh on table; at the inaugural feasts, too, of the pontiffs, this dish was in common use, as we learn from the Comedies[5] of Plautus. It is generally thought that for narcotic[6] poisons there is nothing better than dogs' blood; and it would appear that it was this animal that first taught man the use of emetics. Other me-

[95] See B. xxiv. c. 69. [96] See B. xii. c. 54. [97] See B. xii. c. 62.

[98] No MS., it would appear, gives "corvis" here, the reading being "capris," "goats." Ajasson, however, is most probably right in his suggestion that "corvis" is the correct reading.

[99] See B. x. c. 15. [1] In B. x. c. 26.

[2] Or Youth, in the Eighth Region of the City.

[3] See B. ii. c. 53.

[4] An ancient divinity, who is supposed to have presided over childbirth. See Plutarch, Quæst. Rom. 52.

[5] In the *Saturio* probably, quoted by Festus, and now lost. The aborigines of Canada, and the people of China and Tartary, hold whelps' flesh in esteem as a great delicacy.

[6] "Toxica."

dicinal uses of the dog which are marvellously commended, I shall have occasion to refer to on the appropriate occasions.

CHAP. 15.—REMEDIES CLASSIFIED ACCORDING TO THE DIFFERENT MALADIES. REMEDIES FOR INJURIES INFLICTED BY SERPENTS. REMEDIES DERIVED FROM MICE.

We will now resume the order originally proposed.[7] For stings inflicted by serpents fresh sheeps'-dung, boiled in wine, is considered a very useful application: as also mice split asunder and applied to the wound. Indeed, these last animals are possessed of certain properties by no means to be despised, at the ascension of the planets more particularly, as already[8] stated; the lobes increasing or decreasing in number, with the age of the moon, as the case may be. The magicians have a story that swine will follow any person who gives them a mouse's liver to eat, enclosed in a fig: they say, too, that it has a similar effect upon man, but that the spell may be destroyed by swallowing a cyathus of oil.

CHAP. 16.—REMEDIES DERIVED FROM THE WEASEL.

There are two varieties of the weasel; the one, wild,[9] larger than the other, and known to the Greeks as the "ictis:" its gall is said to be very efficacious as an antidote to the sting of the asp, but of a venomous nature in other respects.[9*] The other kind,[10] which prowls about our houses, and is in the habit, Cicero tells us,[11] of removing its young ones, and changing every day from place to place, is an enemy to serpents. The flesh of this last, preserved in salt, is given, in doses of one denarius, in three cyathi of drink to persons who have been stung by serpents: or else the maw of the animal is stuffed with coriander seed and dried, to be taken for the same purpose in wine. The young one of the weasel is still more efficacious for these purposes.

CHAP. 17.—REMEDIES DERIVED FROM BUGS.

There are some things, of a most revolting nature, but which

[7] Of remedies classified according to the different maladies.
[8] In B. xi. c. 76.
[9] The ferret, most probably.
[9*] See c. 33 of this Book.
[10] The common weasel.
[11] Probably in his work entitled "Admiranda," now lost. Holland says "some take these for our cats."

are recommended by authors with such a degree of assurance, that it would be improper to omit them, the more particularly as it is to the sympathy or antipathy of objects that remedies owe their existence. Thus the bug, for instance, a most filthy insect, and one the very name of which inspires us with loathing, is said to be a neutralizer of the venom of serpents, asps in particular, and to be a preservative against all kinds of poisons. As a proof of this, they tell us that the sting of an asp is never fatal to poultry, if they have eaten bugs that day; and that, if such is the case, their flesh is remarkably beneficial to persons who have been stung by serpents. Of the various recipes[12] given in reference to these insects, the least revolting are the application of them externally to the wound, with the blood of a tortoise; the employment of them as a fumigation to make leeches loose their hold; and the administering of them to animals in drink when a leech has been accidentally swallowed. Some persons, however, go so far as to crush bugs with salt and woman's milk, and anoint the eyes with the mixture; in combination, too, with honey and oil of roses, they use them as an injection for the ears. Field-bugs, again, and those found upon the mallow,[13] are burnt, and the ashes mixed with oil of roses as an injection for the ears.

As to the other remedial virtues attributed to bugs, for the cure of vomiting, quartan fevers, and other diseases, although we find recommendations given to swallow them in an egg, some wax, or in a bean, I look upon them as utterly unfounded, and not worthy of further notice. They are employed, however, for the treatment of lethargy, and with some fair reason, as they successfully neutralize the narcotic effects of the poison of the asp: for this purpose seven of them are administered in a cyathus of water, but in the case of children only four. In cases, too, of strangury, they have been injected into the urinary channel:[14] so true it is that Nature, that universal parent, has engendered nothing without some powerful reason or other. In addition to these particulars, a couple of bugs,

[12] Guettard, a French commentator on Pliny, recommends bugs to be taken internally for hysteria!

[13] Perhaps the Cimex pratensis is meant here. Neither this nor the Cimex juniperinus, the Cimex brassicæ, or the Lygæus hyoscami has the offensive smell of the house bug.

[14] An excellent method, Ajasson remarks, of adding to the tortures of the patient.

it is said, attached to the left arm in some wool that has been stolen from the shepherds, will effectually cure nocturnal fevers; while those recurrent in the daytime may be treated with equal success by enclosing the bugs in a piece of russet-coloured cloth. The scolopendra, on the other hand, is a great enemy to these insects; used in the form of a fumigation, it kills them.

### CHAP. 18.—PARTICULARS RELATIVE TO THE ASP.

The sting of the asp takes deadly effect by causing torpor and drowsiness. Of all serpents, injuries inflicted by the asp are the most incurable; and their venom, if it comes in contact with the blood or a recent wound, produces instantaneous death. If, on the other hand, it touches an old sore, its fatal effects are not so immediate. Taken internally, in however large a quantity, the venom is not injurious,[15] as it has no corrosive properties; for which reason it is that the flesh of animals killed by it may be eaten with impunity.

I should hesitate in giving circulation to a prescription for injuries inflicted by the asp, were it not that M. Varro, then in the eighty-third year of his age, has left a statement to the effect that it is a most efficient remedy for wounds inflicted by this reptile, for the person stung to drink his own urine.

### CHAP. 19.—REMEDIES DERIVED FROM THE BASILISK.

As to the basilisk,[16] a creature which the very serpents fly from, which kills by its odour even, and which proves fatal to man by only looking upon him, its blood has been marvellously extolled by the magicians.[17] This blood is thick and adhesive, like pitch, which it resembles also in colour: dissolved in water, they say, it becomes of a brighter red than that of cinnabar. They attribute to it also the property of ensuring success to petitions preferred to potentates, and to prayers even offered to the gods; and they regard it as a remedy for various diseases, and as an amulet preservative against all noxious spells. Some give it the name of "Saturn's blood."

[15] This is the fact.

[16] See B. viii. c. 33.

[17] The Magi of the East, probably.

### CHAP. 20.—REMEDIES DERIVED FROM THE DRAGON.

The dragon[18] is a serpent destitute of venom. Its head, placed beneath the threshold of a door, the gods being duly propitiated by prayers, will ensure good fortune to the house, it is said. Its eyes, dried and beaten up with honey, form a liniment which is an effectual preservative against the terrors of spectres by night, in the case of the most timorous even. The fat adhering to the heart, attached to the arm with a deer's sinews in the skin of a gazelle, will ensure success in law-suits, it is said; and the first joint of the vertebræ will secure an easy access to persons high in office. The teeth, attached to the body with a deer's sinews in the skin of a roe-buck, have the effect of rendering masters indulgent and potentates gracious, it is said.

But the most remarkable thing of all is a composition, by the aid of which the lying magicians profess to render persons invincible. They take the tail and head of a dragon, the hairs of a lion's forehead with the marrow of that animal, the foam of a horse that has won a race, and the claws of a dog's feet: these they tie up together in a deer's skin, and fasten them alternately with the sinews of a deer and a gazelle. It is, however, no better worth our while to refute such pretensions as these, than it would be to describe the alleged remedies for injuries inflicted by serpents, seeing that all these contrivances are so many evil devices to poison[19] men's morals.

Dragon's fat will repel venomous creatures; an effect which is equally produced by burning the fat of the ichneumon.[20] They will take to flight, also, at the approach of a person who has been rubbed with nettles bruised in vinegar.

### CHAP. 21.—REMEDIES DERIVED FROM THE VIPER.

The application of a viper's head, even if it be not the one that has inflicted the wound, is of infinite utility as a remedy. It is highly advantageous, too, to hold the viper that inflicted the injury on the end of a stick, over the steam of boiling

[18] Some serpent of the boa species, probably. See B. viii. cc. 13, 14, 22, 41, and B. x. cc. 5, 92, 95, 96.

[19] By leading them to confound truth with fiction.

[20] See B. viii. c. 35.

water, for it will quite undo[21] the mischief, they say. The ashes, also, of the viper, are considered very useful, employed as a liniment for the wound. According to what Nigidius tells us, serpents are compelled, by a sort of natural instinct, to return to the person who has been stung by them. The people of Scythia split the viper's head between the ears, in order to extract a small stone,[22] which it swallows in its alarm, they say: others, again, use the head entire.

From the viper are prepared those tablets which are known as "theriaci"[23] to the Greeks: for this purpose the animal is cut away three fingers' length from both the head and the tail, after which the intestines are removed and the livid vein adhering to the back-bone. The rest of the body is then boiled in a shallow pan, in water seasoned with dill, and the bones are taken out, and fine wheaten flour added; after which the preparation is made up into tablets,[24] which are dried in the shade and are employed as an ingredient in numerous medicaments. I should remark, however, that this preparation, it would appear, can only be made from the viper. Some persons, after cleansing the viper in manner above described, boil down the fat, with one sextarius of olive oil, to one half. Of this preparation, when needed, three drops are added to some oil, with which mixture the body is rubbed, to repel the approach of all kinds of noxious animals.

### CHAP. 22.—REMEDIES DERIVED FROM THE OTHER SERPENTS.

In addition to these particulars, it is a well-known fact that for all injuries inflicted by serpents, and those even of an otherwise incurable nature, it is an excellent remedy to apply the entrails of the serpent itself to the wound; as also, that persons who have once swallowed a viper's liver, boiled, will never afterwards be attacked by serpents. The snake, too, is not venomous, except, indeed, upon certain days of the month when it is irritated by the action of the moon: it is a very useful plan to take it alive, and pound it in water, the wound inflicted by it being fomented with the preparation. Indeed, it is generally supposed that this reptile is possessed of

[21] This is *perhaps* the meaning of "præcanere." Sillig suggests "recanere."

[22] Which was said to act as an antidote to the poison, applied to the wound.

[23] "Antidotes to serpents' poison." [24] "Pastilli."

numerous other remedial properties, as we shall have occasion more fully to mention from time to time: hence it is that the snake is consecrated to Æsculapius.[25] As for Democritus, he has given some monstrous preparations from snakes, by the aid of which the language of birds, he says, may be understood.[26]

The Æsculapian snake was first brought to Rome from Epidaurus,[27] but at the present day it is very commonly reared in our houses[28] even; so much so, indeed, that if the breed were not kept down by the frequent conflagrations, it would be impossible to make head against the rapid increase of them. But the most beautiful of all the snakes are those which are of an amphibious nature. These snakes are known as "hydri,"[29] or water-snakes: in virulence their venom is inferior to that of no other class of serpents, and their liver is preserved as a remedy for the ill effects of their sting.

A pounded scorpion neutralizes the venom of the spotted lizard.[30] From this last animal, too, there is a noxious preparation made; for it has been found that wine in which it has been drowned, covers the face of those who drink it with morphew. Hence it is that females, when jealous of a rival's beauty, are in the habit of stifling a spotted lizard in the unguents which they use. In such a case, the proper remedy is yolk of egg, honey, and nitre. The gall of a spotted lizard, beaten up in water, attracts weasels, they say.

### CHAP. 23.—REMEDIES DERIVED FROM THE SALAMANDER.

But of all venomous animals it is the salamander[31] that is

[25] The god of Medicine.

[26] A favourite reverie with the learned of the East. Dupont de Nemours, Ajasson informs us, has left several Essays on this subject.

[27] In Peloponnesus, the principal seat of his worship. A very full account of his introduction, under the form of a huge serpent, into the city of Rome, is given by Ovid, Met. B. xv. l. 544, *et seq.* This took place B.C. 293.

[28] Among the snakes that are tamed, Ajasson enumerates the Coluber flagelliformis of Dandin, or American coach-whip snake; the Coluber constructor of Linnæus, or Black snake; and the Coluber viridiflavus of Lacepede. The Æsculapian serpent is still found in Italy.

[29] Or "chersydri," "amphibious."

[30] Or "starred lizard"—"stellio." In reality it is not poisonous.

[31] See B. x. c. 86. Some kind of starred lizard, or an eft or newt perhaps, was thus called: but in most respects it appears to be entirely a fabulous animal.

by far the most dangerous; for while other reptiles attack individuals only, and never kill many persons at a time—not to mention the fact that after stinging a human being they are said to die of remorse, and the earth refuses to harbour[32] them—the salamander is able to destroy whole nations at once, unless they take the proper precautions against it. For if this reptile happens to crawl up a tree, it infects all the fruit with its poison, and kills those who eat thereof by the chilling properties of its venom, which in its effects is in no way different from aconite. Nay, even more than this, if it only touches with its foot the wood upon which bread is baked, or if it happens to fall into a well, the same fatal effects will be sure to ensue. The saliva, too, of this reptile, if it comes in contact with any part of the body, the sole of the foot even, will cause the hair to fall off from the whole of the body. And yet the salamander, highly venomous as it is, is eaten by certain animals, swine for example; owing, no doubt, to that antipathy which prevails in the natural world.

From what we find stated, it is most probable, that, next to the animals which eat it, the best neutralizers of the poison of this reptile, are, cantharides taken in drink, or a lizard eaten with the food; other antidotes we have already mentioned, or shall notice in the appropriate place. As to what the magicians[33] say, that it is proof against fire, being, as they tell us, the only animal that has the property of extinguishing fire, if it had been true, it would have been made trial of at Rome long before this. Sextius says that the salamander, preserved in honey and taken with the food, after removing the intestines, head, and feet, acts as an aphrodisiac: he denies also that it has the property of extinguishing fire.

CHAP. 24.—REMEDIES DERIVED FROM BIRDS FOR INJURIES INFLICTED BY SERPENTS. REMEDIES DERIVED FROM THE VULTURE.

Among the birds that afford us remedies against serpents, it is the vulture that occupies the highest rank; the black vulture, it has been remarked, being less efficacious than the others. The smell of their feathers, burnt, will repel serpents, they say; and it has been asserted that persons who carry the heart of

[32] See B ii. c. 63.

[33] He probably alludes to the Magi of Persia here, as most of the stories about the salamander appear to bear the aspect of an Eastern origin.

this bird about them will be safe, not only from serpents, but from wild beasts as well, and will have nothing to fear from the attacks of robbers or from the wrath of kings.

### CHAP. 25.—REMEDIES DERIVED FROM POULTRY.

The flesh of cocks and capons, applied warm the moment it has been plucked from the bones, neutralizes the venom of serpents; and the brains, taken in wine, are productive of a similar effect. The people of Parthia, however, prefer applying a hen's brains to the wound. Poultry broth, too, is highly celebrated as a cure, and is found marvellously useful in many other cases. Panthers and lions will never touch persons who have been rubbed with it, more particularly if it has been flavoured with garlic. The broth that is made of an old cock is more relaxing to the bowels; it is very good also for chronic fevers, numbness of the limbs, cold shiverings and maladies of the joints, pains also in the head, defluxions of the eyes, flatulency, sickness at stomach, incipient tenesmus, liver complaints, diseases of the kidneys, affections of the bladder, indigestion, and asthma. Hence there are several recipes for preparing this broth; it being most efficacious when boiled up with sea-cabbage,[34] salted tunny,[35] capers, parsley, the plant mercurialis,[36] polypodium,[37] or dill. The best plan, however, is to boil the cock or capon with the plants above-mentioned in three congii of water, down to three semi-sextarii; after which it should be left to cool in the open air, and given at the proper moment, just after an emetic has been administered.

And here I must not omit to mention one marvellous fact, even though it bears no reference to medicine: if the flesh of poultry is mingled with gold[38] in a state of fusion, it will absorb the metal and consume it, thus showing that it acts as a poison upon gold. If young twigs are made up into a collar and put round a cock's neck, it will never crow.

[34] See B. xxii. c. 33.

[35] "Cybium." See B. ix. c. 18. Dioscorides says the plant *cnecos*, described by Pliny in B. xxi. c. 107.

[36] See B. xxv. c. 18, and B. xxvii. c. 77.

[37] See B. xvi. c. 92, and B. xxvi. cc. 37, 66.

[38] "Hereupon peradventure it is that in collices and cockbroths we use to seeth pieces of gold, with an opinion to make them thereby more restorative."—*Holland.*

CHAP. 26.—REMEDIES DERIVED FROM OTHER BIRDS.

The flesh of pigeons also, or of swallows, used fresh and minced, is a remedy for injuries inflicted by serpents: the same, too, with the feet of a horned owl, burnt with the plant plumbago.[39] While mentioning this bird, too, I must not forget to cite another instance of the impositions practised by the magicians: among other prodigious lies of theirs, they pretend that the heart of a horned owl, applied to the left breast of a woman while asleep, will make[40] her disclose all her secret thoughts. They say, also, in addition to this, that persons who have it about them in battle will be sure to display valour. They describe, too, certain remedies made from the egg of this bird for the hair. But who, pray, has ever had the opportunity of seeing the egg of a horned owl, considering that it is so highly ominous to see the bird itself?[41] And then besides, who has ever thought proper to make the experiment, and upon his hair more particularly? In addition to all this, the magicians go so far as to engage to make the hair curl by using the blood of the young of the horned owl.

What they tell us, too, about the bat, appears to belong to pretty much the same class of stories: if one of these animals is carried alive, three times round a house, they say, and then nailed outside of the window with the head downwards, it will have all the effects of a countercharm: they assert, also, that the bat is a most excellent preservative for sheepfolds, being first carried three times round them, and then hung up by the foot over the lintel of the door.[42] The blood of the bat is also recommended by them as a sovereign remedy, in combination with a thistle,[43] for injuries inflicted by serpents.

CHAP. 27.—REMEDIES FOR THE BITE OF THE PHALANGIUM. THE SEVERAL VARIETIES OF THAT INSECT, AND OF THE SPIDER.

Of the phalangium,[44] an insect unknown to Italy, there are

[39] See B. xxv. c. 97.

[40] The same is said of a frog's tongue, in B. xxxii. c. 18.

[41] That is no reason, as Ajasson remarks, why the egg should not be found, it being easy to take it from the nest at night, when, the bird being absent, no ill omen will arise from seeing it.

[42] We still see bats nailed upon and over stable doors in various parts of this country.

[43] "Carduus."

[44] A sort of spider. See B. xi. cc. 24, 28, 29.

numerous kinds; one of which resembles the ant, but is much larger, with a red head, black as to the other parts of the body, and covered with white spots. Its sting is much more acute than that of the wasp, and it lives mostly in the vicinity of ovens and mills. The proper remedy is, to present before the eyes of the person stung another insect of the same description, a purpose for which they are preserved when found dead. Their husks also, found in a dry state, are beaten up and taken in drink for a similar purpose. The young of the weasel, too, as already[45] stated, are possessed of a similar property. The Greeks give the name of "phalangion" also to a kind of spider, but they generally distinguish it by the surname of the "wolf."[46] A third kind, also known as the "phalangium," is a spider with a hairy[47] body, and a head of enormous size. When opened, there are found in it two small worms, they say: these, attached in a piece of deer's skin, before sunrise, to a woman's body, will prevent conception, according to what Cæcilius, in his Commentaries, says. This property lasts, however, for a year only; and, indeed, it is the only one of all the anti-conceptives[48] that I feel myself at liberty to mention, in favour of some women whose fecundity, quite teeming with children,[49] stands in need of some such respite.

There is another kind again, called "rhagion,"[50] similar to a black grape in appearance, with a very diminutive mouth, situate beneath the abdomen, and extremely short legs, which have all the appearance of not being fully developed. The bite of this last insect causes fully as much pain as the sting of the scorpion, and the urine of persons who are injured by it, presents filmy appearances like cobwebs. The asterion[51] would be identical with it, were it not distinguished by white streaks upon the body: its bite causes failing in the knees. But worse than either of these last, is a blue spider, covered with black hair, and causing dimness of the sight and vomiting of a matter like cobwebs in appearance. A still more dangerous kind is one which differs only from the hornet, in form, in

[45] In c. 16 of this Book.
[46] "Lupus." See B. xi. c. 28.
[47] The Tarantula has been suggested, but that is a native of Italy.
[48] "Atocium."
[49] "Plena liberis."
[50] From ῥάξ, a "grape."
[51] Or "starred" spider. Nicander describes all these varieties of the Phalangium.

being destitute of wings, and the bite of which causes a wasting away of the system. The myrmecion[52] in the head resembles the ant, has a black body spotted with white, and causes by its bite a pain like that attendant upon the sting of the wasp. Of the tetragnathius[53] there are two varieties, the more noxious of which has two white streaks crossing each other on the middle of the head; its bite causes the mouth to swell. The other one is of an ashy colour, whitish on the posterior part of the body, and not so ready to bite.

The least noxious of all is the spider that is seen extending its web along the walls, and lying in wait for flies; it is of the same ashy colour as the last.

For the bite of all spiders, the best remedies are: a cock's brains, taken in oxycrate with a little pepper; five ants, swallowed in drink; sheep's dung, applied in vinegar; and spiders of any kind, left to putrefy in oil. The bite of the shrew-mouse is cured by taking lamb's rennet in wine; the ashes of a ram's foot with honey; or a young weasel, prepared in manner already[54] mentioned by us when speaking of serpents. In cases where a shrewmouse has bitten beasts of burden, a mouse, fresh caught, is applied to the wound with oil, or a bat's gall with vinegar. The shrew-mouse itself too, split asunder and applied to the wound, is a cure for its bite; indeed, if the animal is with young when the injury is inflicted, it will instantly burst asunder. The best plan is to apply the mouse itself which has inflicted the bite, but others are commonly kept for this purpose, either steeped in oil or coated with clay. Another remedy, again, for its bite is the earth taken from the rut made by a cart-wheel; for this animal, it is said, owing to a certain torpor which is natural to it, will never cross[55] a rut made by a wheel.

### CHAP. 28.—REMEDIES DERIVED FROM THE STELLIO OR SPOTTED LIZARD.

The stellio, in its turn, is said to have the greatest antipathy to the scorpion;[56] so much so indeed, that the very sight of it strikes terror in that reptile, and a torpor attended with cold sweats; hence it is that this lizard is left to putrefy in oil, as

[52] From μυρμηξ, "an ant."
[53] The "four-jawed" spider.
[54] In c. 16 of this Book.
[55] See B. viii. c. 83.
[56] See B. xix. c. 22. For further particulars as to the Stellio, see B. xi. c. 31, and the Note.

a liniment for injuries inflicted by the scorpion. Some persons boil down the oil with litharge, and make a sort of plaster of it to apply to the wound. The Greeks give the name of "colotes" to this lizard, as also "ascalabotes," and "galeotes:" it is never[57] found in Italy, and is covered with small spots, utters a shrill, piercing noise, and lives on food; characteristics, all of them, foreign to the stellio of Italy.

CHAP. 29.—REMEDIES DERIVED FROM VARIOUS INSECTS.

Poultry dung, too, is good as an application for the sting of the scorpion; a dragon's liver also; a lizard or mouse split asunder; or else the scorpion itself, either applied to the wound, grilled and eaten, or taken in two cyathi of undiluted wine. One peculiarity of the scorpion is, that it never stings the palm of the hand, and never touches any parts of the body but those covered with hair. Any kind of pebble, applied to the wound on the side which has lain next to the ground, will alleviate the pain. A potsherd too, covered with earth on any part of it, and applied just as it is found, will effect a cure, it is said—the person, however, who applies it must not look behind him, and must be equally careful that the sun does not shine upon him. Earth-worms also, are pounded and applied to the wound; in addition to which, they form ingredients in numerous other medicaments, being kept in honey for the purpose.

For injuries inflicted by bees, wasps, hornets, and leeches, the owlet is considered a very useful remedy; persons, too, who carry about them the beak of the woodpecker[58] of Mars are never injured by any of these creatures. The smaller kinds of locusts also, destitute of wings and known as "attelebi," are a good remedy for the sting of the scorpion.

There is a kind of venomous ant, by no means common in Italy; Cicero calls it "solipuga," and in Bætica it is known as "salpuga."[59] The proper remedy for its venom and that of all kinds of ants is a bat's heart. We have already[60] stated that cantharides are an antidote to the salamander.

CHAP. 30.—REMEDIES DERIVED FROM CANTHARIDES.

But with reference to cantharides, there has been considerable

[57] This is probably an error; see the Note to B. xi. c. 31.

[58] See B. x. cc. 18, 41, 44, and 50.

[59] See B. viii. c. 43. Ajasson remarks that this is a mere fabulous story, in reference to the venom of the ants.

[60] In B. xxix. c. 23.

controversy on the subject, seeing that, taken internally, they are a poison, attended with excruciating pains in the bladder. Cossinus, a Roman of the Equestrian order, well known for his intimate friendship with the Emperor Nero, being attacked with lichen,[61] that prince sent to Egypt for a physician to cure him; who recommending a potion prepared from cantharides, the patient was killed in consequence. There is no doubt, however, that applied externally they are useful, in combination with juice of Taminian[62] grapes, and the suet of a sheep or she-goat. As to the part of the body in which the poison of the insect is situate, authors are by no means agreed. Some fancy that it exists in the feet and head, while others, again, deny it; indeed the only point that has been well ascertained is, that the wings[63] are the only antidote to their venom, wherever it may be situate.

Cantharides are produced from a small grub, found more particularly in the spongy excrescences which grow on the stem of the dog-rose,[64] and still more abundantly upon the ash. Other kinds, again, are found upon the white rose, but they are by no means so efficacious. The most active of all in their properties, are those which are spotted with yellow streaks running transversely across the wings, and are plump and well-filled. Those which are small, broad, and hairy, are not so powerful in their operation, and the least useful of all are those which are thin and shrivelled, and present one uniform colour. They are put in a small earthen pot, not coated with pitch, and stopped at the mouth with a linen cloth, a layer of full-blown roses being placed upon them; they are then suspended over vinegar boiled with salt, until the steam has penetrated the cloth and stifled them, after which they are put by for use. They have a caustic effect upon the skin, and cover the ulcerations with a crust; a property which belongs also to the pine-caterpillar[65] found upon the pitch-tree, and to the buprestis,[66] both of which are prepared in a similar manner.

All these insects are extremely efficacious for the cure of

[61] See B. xxvi. c. 2.

[62] See B. xxiii. c. 14.

[63] It has been ascertained by experiment that the vesicatory principle resides in the wings more particularly. Ajasson remarks, that it is possible that the ancients may not have known the genuine Cantharides, the Canth. vesicatoria of modern medicine.

[64] See B. xxiv. c. 74.

[65] "Pityocampæ." See B. xxiii. cc. 30, 40, and B. xxviii. c. 33.

[66] See B. xxviii. cc. 21, 33, 42, and B. xxx. c. 10.

leprosy and lichens. It is said, too, that they act as an emmenagogue and diuretic, for which last reason Hippocrates used to prescribe them for dropsy. Cato of Utica was reproached with selling poison, because, when disposing of a royal property by auction,[67] he sold a quantity of cantharides, at the price of sixty thousand sesterces. (5.) We may here remark, too, that it was on the same occasion that some ostrich fat was sold, at the price of thirty thousand sesterces, a substance which is preferable to goose-grease in every respect.

### CHAP. 31.—VARIOUS COUNTER-POISONS.

We have already[68] spoken of various kinds of poisonous honey: the antidote employed for it is honey in which the bees have been stifled. This honey, too, taken in wine, is a remedy for indispositions caused by eating fish.

### CHAP. 32.—REMEDIES FOR THE BITE OF THE MAD DOG.

When a person has been bitten by a mad dog, he may be preserved from hydrophobia by applying the ashes of a dog's head to the wound. All ashes of this description, we may here remark once for all, are prepared in the same method; the substance being placed in a new earthen vessel well covered with potter's clay, and put into a furnace. These ashes, too, are very good, taken in drink, and hence some recommend the head itself to be eaten in such cases. Others, again, attach to the body of the patient a maggot, taken from the carcase of a dead dog; or else place the menstruous blood of a bitch, in a linen cloth, beneath his cup, or insert in the wound ashes of hairs from the tail of the dog that inflicted the bite. Dogs will fly from any one who has a dog's heart about him, and they will never bark at a person who carries a dog's tongue in his shoe, beneath the great toe, or the tail of a weasel which has been set at liberty after being deprived of it. There is beneath the tongue of a mad dog a certain slimy spittle, which, taken in drink, is a preventive of hydrophobia: but much the most useful plan is, to take the liver of the dog that has inflicted the injury, and eat it raw, if possible; should that not be the case, it must be cooked in some way or other, or else a broth must be taken, prepared from the flesh.

[67] At the sale, under his supervision, of the property of Ptolemy, king of Cyprus.

[68] In B. xxi. c. 34.

There is a small worm[69] in a dog's tongue, known as "lytta"[70] to the Greeks: if this is removed from the animal while a pup, it will never become mad or lose its appetite. This worm, after being carried thrice round a fire, is given to persons who have been bitten by a mad dog, to prevent them from becoming mad. This madness, too, is prevented by eating a cock's brains; but the virtue of these brains lasts for one year only, and no more. They say, too, that a cock's comb, pounded, is highly efficacious as an application to the wound; as also, goose-grease, mixed with honey. The flesh also of a mad dog is sometimes salted, and taken with the food, as a remedy for this disease. In addition to this, young puppies of the same sex as the dog that has inflicted the injury, are drowned in water, and the person who has been bitten eats their liver raw. The dung of poultry, provided it is of a red colour, is very useful, applied with vinegar; the ashes, too, of the tail of a shrew-mouse, if the animal has survived and been set at liberty; a clod from a swallow's nest, applied with vinegar; the young of a swallow, reduced to ashes; or the skin or old slough of a serpent that has been cast in spring, beaten up with a male crab in wine: this slough, I would remark, put away by itself in chests and drawers, destroys moths.

So virulent is the poison of the mad dog, that its very urine even, if trod upon, is injurious, more particularly if the person has any ulcerous sores about him. The proper remedy in such case is to apply horse-dung, sprinkled with vinegar, and warmed in a fig. These marvellous properties of the poison will occasion the less surprise, when we remember that, "a stone bitten by a dog" has become a proverbial expression for discord and variance.[71] Whoever makes water where a dog has previously watered, will be sensible of numbness in the loins, they say.

[69] This is still the vulgar notion; but in reality there is no worm, but certain white pustules beneath the tongue, which break spontaneously at the end of twelve days after birth. Puppies are still "wormed," as it is called, as a preventive of hydrophobia, it is said, and of a propensity to gnaw objects which come in their way. The "worming" consists in the breaking of these pustules.

[70] "Rage" or "madness."

[71] "For the manner of a dog is to bee angrie with the stone that is thrown at him, without regard to the partie that flung it, whereupon grew the proverb in Greeke, *κύων εἰς τὸν λίθον ἀγανακτοῦσα* ('A dog venting his rage upon a stone.')"—*Holland.*

The lizard known by some persons as the "seps,"[72] and by others as the "chalcidice," taken in wine, is a cure for its own bite.

### CHAP. 33.—REMEDIES FOR THE OTHER POISONS.

Where persons have been poisoned by noxious preparations from the wild weasel,[73] the proper remedy is the broth of an old cock, taken in considerable quantities. This broth, too, is particularly good, taken as a counter-poison for aconite, in combination with a little salt. Poultry dung—but the white part only—boiled with hyssop, or with honied wine, is an excellent antidote to the poison of fungi and of mushrooms: it is a cure also for flatulency and suffocations; a thing the more to be wondered at, seeing that if any other living creature only tastes this dung, it is immediately attacked with griping pains and flatulency. Goose blood, taken with an equal quantity of olive oil, is an excellent neutralizer of the venom of the sea-hare: it is kept also as an antidote for all kinds of noxious drugs, made up into lozenges with red earth of Lemnos and juice of white-thorn, five drachmæ of the lozenges being taken in three cyathi of water. The same property belongs also to the young of the weasel, prepared in manner already[74] mentioned.

Lambs' rennet is an excellent antidote to all noxious preparations; the blood, also, of ducks from Pontus;[75] for which reason it is preserved in a dry state, and dissolved in wine when wanted, some persons being of opinion that the blood of the female bird is the most efficacious. In a similar manner, the crop of a stork acts as an universal counter-poison; and so does sheep's rennet. A broth made from ram's flesh is particularly good as a remedy for cantharides: sheep's milk also, taken warm; this last being very useful in cases where persons have drunk an infusion of aconite, or have swallowed the buprestis in drink. The dung of wood-pigeons is particularly good taken internally as an antidote to quicksilver; and for

[72] See B. xx. cc. 6, 20. It is somewhat doubtful what the "seps" really was; whether, in fact, it was a lizard at all. Littré suggests the Tridactylus saurius.

[73] Or Ferret, probably. See c. 16 of this Book.

[74] In c. 16 of this Book.

[75] From the circumstance that that country was covered with herbs and plants of a medicinal nature.

narcotic poisons the common weasel is kept dried, and taken internally, in doses of two drachmæ.

CHAP. 34. (6.)—REMEDIES FOR ALOPECY.

Where the hair has been lost through alopecy,[76] it is made to grow again by using ashes of burnt sheep's dung, with oil of cyprus[77] and honey; or else the hoof of a mule of either sex, burnt to ashes and mixed with oil of myrtle. In addition to these substances, we find our own writer, Varro, mentioning mouse-dung, which he calls "muscerda,"[78] and the heads of flies, applied fresh, the part being first rubbed with a fig-leaf. Some recommend the blood of flies, while others, again, apply ashes of burnt flies for ten days, in the proportion of one part of the ashes to two of ashes of papyrus or of nuts. In other cases, again, we find ashes of burnt flies kneaded up with woman's milk and cabbage, or, in some instances, with honey only. It is generally believed that there is no creature less docile or less intelligent than the fly; a circumstance which makes it all the more marvellous that at the sacred games at Olympia, immediately after the immolation of the bull in honour of the god called "Myiodes,"[79] whole clouds of them take their departure from that territory. A mouse's head or tail, or, indeed, the whole of the body, reduced to ashes, is a cure for alopecy, more particularly when the loss of the hair has been the result of some noxious preparation. The ashes of a hedge-hog, mixed with honey, or of its skin, applied with tar, are productive of a similar effect. The head, too, of this last animal, reduced to ashes, restores the hair to scars upon the body; the place being first prepared, when this cure is made use of, with a razor and an application of mustard: some persons, however, prefer vinegar for the purpose. All the properties attributed to the hedge-hog are found in the porcupine in a still higher degree.[80]

A lizard burnt, as already[81] mentioned, with the fresh root of a reed, cut as fine as possible, to facilitate its being re-

[76] So called from ἀλωπηξ, "a fox," an animal very subject to the loss of its hair.

[77] See B. xii. c. 51.

[78] So swine's dung was called "sucerda," and cowdung "bucerda."

[79] Or Maagrus, the "fly catcher," the name of a hero, invoked at Aliphera, at the festivals of Athena, as the protector against flies. It was also a surname of Hercules. See B. x. c. 40.

[80] See B. viii. c. 53.

[81] In c. 32 of this Book.

duced to ashes, and then mixed with oil of myrtle, will prevent the hair from coming off. For all these purposes green lizards are still more efficacious, and the remedy is rendered most effectual, when salt is added, bears' grease, and pounded onions. Some persons boil ten green lizards in ten sextarii of oil, and content themselves with rubbing the place with the mixture once a month. Alopecy is also cured very speedily with the ashes of a viper's skin, or by an application of fresh poultry dung. A raven's egg, beaten up in a copper vessel and applied to the head, previously shaved, imparts a black colour to the hair; care must be taken, however, to keep some oil in the mouth till the application is quite dry, or else the teeth will turn black as well. The operation must be performed also in the shade, and the liniment must not be washed off before the end of three days. Some persons employ the blood and brains of a raven, in combination with red wine; while others, again, boil down the bird, and put it, at bedtime, in a vessel made of lead. With some it is the practice, for the cure of alopecy, to apply bruised cantharides with tar, the skin being first prepared with an application of nitre:—it should be remembered, however, that cantharides are possessed of caustic properties, and due care must be taken not to let them eat too deep into the skin. For the ulcerations thus produced, it is recommended to use applications made of the heads, gall, and dung of mice, mixed with hellebore and pepper.

### CHAP. 35.—REMEDIES FOR LICE AND FOR PORRIGO.

Nits are destroyed by using dogs' fat, eating serpents cooked[82] like eels, or else taking their sloughs in drink. Porrigo is cured by applying sheep's gall with Cimolian chalk, and rubbing the head with the mixture till dry.

### CHAP. 36.—REMEDIES FOR HEAD-ACHE AND FOR WOUNDS ON THE HEAD.

A good remedy for head-ache are the heads taken from the snails which are found without[83] shells, and in an imperfect state. In these heads there is found a hard stony substance, about as large as a common pebble: on being extracted from

[82] A recipe well understood in the restaurants of the French provinces, Ajasson says, but it is doubtful whether with the object named by our author.

[83] He means slugs probably.

the snail, it is attached to the patient, the smaller snails being pounded and applied to the forehead. Wool-grease, too, is used for a similar purpose; the bones of a vulture's head, worn as an amulet; or the brains of that bird, mixed with oil and cedar resin, and applied to the head and introduced into the nostrils. The brains of a crow or owlet, are boiled and taken with the food: or a cock is put into a coop, and kept without food a day and a night, the patient submitting to a similar abstinence, and attaching to his head some feathers plucked from the neck or the comb of the fowl. The ashes, too, of a weasel are applied in the form of a liniment; a twig is taken from a kite's nest, and laid beneath the patient's pillow; or a mouse's skin is burnt, and the ashes applied with vinegar: sometimes, also, the small bone is extracted from the head of a snail that has been found between two cart ruts, and after being passed through a gold ring, with a piece of ivory, is attached to the patient in a piece of dog's skin; a remedy well known to most persons, and always used with success.[84]

For fractures of the cranium, cobwebs are applied, with oil and vinegar; the application never coming away till a cure has been effected. Cobwebs are good, too, for stopping the bleeding of wounds[85] made in shaving. Discharges of blood from the brain are arrested by applying the blood of a goose or duck, or the grease of those birds with oil of roses. The head of a snail cut off with a reed, while feeding in the morning, at full moon more particularly, is attached to the head in a linen cloth, with an old thrum, for the cure of headache; or else a liniment is made of it, and applied with white wax to the forehead. Dogs' hairs are worn also, attached to the forehead in a cloth.

### CHAP. 37.—REMEDIES FOR AFFECTIONS OF THE EYELIDS.

A crow's brains, taken with the food, they say, will make the eyelashes grow; or else wool-grease, applied with warmed myrrh, by the aid of a fine probe. A similar result is promised by using the following preparation: burnt flies and ashes of mouse-dung are mixed in equal quantities, to the amount of half a denarius in the whole; two sixths of a dena-

[84] He does not appear to state this on hearsay only!

[85] Cobwebs are still used for this purpose, as also the fur from articles made of beaver. Ajasson mentions English taffeta.

rius of antimony are then added, and the mixture is applied with wool-grease. For the same purpose, also, the young ones of a mouse are beaten up, in old wine, to the consistency of the strengthening preparations known as "acopa."[86] When eyelashes are plucked out that are productive of inconvenience, they are prevented from growing again by using a hedge-hog's gall; the liquid portion, also, of a spotted lizard's eggs; the ashes of a burnt salamander; the gall of a green lizard, mixed with white wine, and left to thicken to the consistency of honey in a copper vessel in the sun; the ashes of a swallow's young, mixed with the milky juice of tithymalos;[87] or else the slime of snails.

### CHAP. 38.—REMEDIES FOR DISEASES OF THE EYES.

According to what the magicians say, glaucoma[88] may be cured by using the brains of a puppy seven days old; the probe being inserted in the right side [of the eye], if it is the right eye that is being operated on, and in the left side, if it is the left. The fresh gall, too, of the asio[89] is used, a bird belonging to the owlet tribe, with feathers standing erect like ears. Apollonius of Pitanæ used to prefer dog's gall, in combination with honey, to that of the hyæna, for the cure of cataract, as also of albugo. The heads and tails of mice, reduced to ashes and applied to the eyes, improve the sight, it is said; a result which is ensured with even greater certainty by using the ashes of a dormouse or wild mouse, or else the brains or gall of an eagle. The ashes and fat of a field-mouse, beaten up with Attic honey and antimony, are remarkably useful for watery eyes—what this antimony[90] is, we shall have occasion to say when speaking of metals.

For the cure of cataract, the ashes of a weasel are used, as also the brains of a lizard or swallow. Weasels, boiled and pounded, and so applied to the forehead, allay defluxions of the eyes, either used alone, or else with fine flour or with frankincense. Employed in a similar manner, they are very good for sun-stroke, or in other words, for injuries inflicted by the sun. It is a remarkably good plan, too, to burn these animals alive, and to use their ashes, with Cretan honey, as a liniment for

[86] See c. 13 of this Book. [87] See B. xxvi. c. 39.
[88] A disease of the crystalline humours of the eye.
[89] See B. x. c. 33. [90] "Stibium." See B. xxxiii. c. 33.

films upon the eyes. The cast-off[91] slough of the asp, with the fat of that reptile, forms an excellent ointment for improving the sight in beasts of burden. To burn a viper alive in a new earthen vessel, with one cyathus of fennel juice, and a single grain of frankincense, and then to anoint the eyes with the mixture, is remarkably good for cataract and films upon the eyes; the preparation being generally known as "echeon."[91*] An eye-salve, too, is prepared, by leaving a viper to putrefy in an earthen pot, and bruising the maggots that breed in it with saffron. A viper, too, is burnt in a vessel with salt, and the preparation is applied to the tip of the tongue, to improve the eyesight, and to act generally as a corrective of the stomach and other parts of the body. This salt is given also to sheep, to preserve them in health, and is used as an ingredient in antidotes to the venom of serpents.

Some persons, again, use vipers as an article of food: when this is done, it is recommended, the moment they are killed, to put some salt in the mouth and let it melt there; after which, the body must be cut away to the length of four fingers at each extremity, and, the intestines being first removed, the remainder boiled in a mixture of water, oil, salt, and dill. When thus prepared, they are either eaten at once, or else kneaded in a loaf, and taken from time to time as wanted. In addition to the above-mentioned properties, viper-broth cleanses all parts of the body of lice,[92] and removes itching sensations as well upon the surface of the skin. The ashes, also, of a viper's head, used by themselves, are evidently productive of considerable effects; they are employed very advantageously in the form of a liniment for the eyes; and so, too, is viper's fat. I would not make so bold as to advise what is strongly recommended by some, the use, namely, of vipers' gall; for that, as already stated[93] on a more appropriate occasion, is nothing else but the venom of the serpent. The fat of snakes, mixed with verdigrease,[94] heals ruptures of the cuticle of the eyes; and the skin or slough that is cast off in spring, employed as a friction for the eyes, improves the sight. The

[91] "Exuta vere," as suggested by Sillig, would appear a better reading than "ex utero," which can have no meaning here.

[91*] "Viper mixture."

[92] See c. 35 of this Book.

[93] In B. xi. c. 62.

[94] As Ajasson remarks, this would be very likely to gangrene the wound.

gall of the boa[95] is highly vaunted for the cure of albugo, cataract, and films upon the eyes, and the fat is thought to improve the sight.

The gall of the eagle, which tests its young, as already stated,[96] by making them look upon the sun, forms, with Attic honey, an eye-salve which is very good for the cure of webs, films, and cataracts of the eye. A vulture's gall, too, mixed with leek-juice and a little honey, is possessed of similar properties; and the gall of a cock, dissolved in water, is employed for the cure of argema and albugo: the gall, too, of a white cock, in particular, is recommended for cataract. For short-sighted persons, the dung of poultry is recommended as a liniment, care being taken to use that of a reddish colour only. A hen's gall, too, is highly spoken of, and the fat in particular, for the cure of pustules upon the pupils, a purpose for which hens are expressly fattened. This last substance is marvellously useful for ruptures of the coats of the eyes, incorporated with the stones known as schistos[97] and hæmatites. Hens' dung, too, but only the white part of it, is kept with old oil in boxes made of horn, for the cure of white specks upon the pupil of the eye. While mentioning this subject, it is worthy of remark, that peacocks[98] swallow their dung, it is said, as though they envied man the various uses of it. A hawk, boiled in oil of roses, is considered extremely efficacious as a liniment for all affections of the eyes, and so are the ashes of its dung, mixed with Attic honey. A kite's liver, too, is highly esteemed; and pigeons' dung, diluted with vinegar, is used as an application for fistulas of the eye, as also for albugo and marks upon that organ. Goose gall and duck's blood are very useful for contusions of the eyes, care being taken, immediately after the application, to anoint them with a mixture of wool-grease and honey. In similar cases, too, gall of partridges is used, with an equal quantity of honey; but where it is only wanted to improve the sight, the gall is used alone. It is generally thought, too, upon the authority of Hippocrates,[99]

[95] See B. viii. c. 14. Not the Boa constrictor of modern Natural History.

[96] In B. x. c. 3.

[97] See B. xxxiii. c. 25, and B. xxxvi. cc. 37, 38.

[98] The tongues of peacocks and larks are recommended for epilepsy, by Lampridius, in his Life of the Emperor Elagabalus. The statement in the text is, of course, a fiction.

[99] The reading here is doubtful.

that the gall to be used for these purposes should be kept in a silver box.

Partridges' eggs, boiled in a copper vessel, with honey, are curative of ulcers of the eyes, and of glaucoma. For the treatment of blood-shot eyes, the blood of pigeons, ring-doves, turtle-doves, and partridges is remarkably useful; but that of the male pigeon is generally looked upon as the most efficacious. For this purpose, a vein is opened beneath the wing, it being warmer than the rest of the blood, and consequently more[1] beneficial. After it is applied, a compress, boiled in honey, should be laid upon it, and some greasy wool, boiled in oil and wine. Nyctalopy,[2] too, is cured by using the blood of these birds, or the liver of a sheep—the most efficacious being that of a tawny sheep—as already[3] stated by us when speaking of goats. A decoction, too, of the liver is recommended as a wash for the eyes, and, for pains and swellings in those organs, the marrow, used as a liniment. The eyes of a horned owl, it is strongly asserted, reduced to ashes and mixed in an eye-salve, will improve the sight. Albugo is made to disappear by using the dung of turtle-doves, snails burnt to ashes, and the dung of the cenchris, a kind of hawk, according to the Greeks.[4] All the substances above mentioned, used in combination with honey, are curative of argema: honey, too, in which the bees have died, is remarkably good for the eyes.

A person who has eaten the young of the stork will never suffer from ophthalmia for many years to come, it is said; and the same when a person carries about him the head of a dragon:[5] it is stated, too, that the fat of this last-named animal, applied with honey and old oil, will disperse incipient films of the eyes. The young of the swallow are blinded at full moon, and the moment their sight is restored,[6] their heads are burnt, and the ashes are employed, with honey, to improve the sight, and for the cure of pains, ophthalmia, and contusions of the eyes.

Lizards, also, are employed in numerous ways as a remedy

[1] A puerile reason, Ajasson remarks. It is much more probable that the reason was, because this vein was the most easily discovered.

[2] See B. xxviii. c. 47.

[3] In B. xxviii. c. 47.

[4] See B. x. c. 52.

[5] The serpent so called.

[6] An absurdity. The probability is, that the sight of the young birds was only *supposed* to be destroyed, the operation being imperfectly performed.

for diseases of the eyes. Some persons enclose a green lizard in a new earthen vessel, together with nine of the small stones known as "cinædia,"[7] which are usually attached to the body for tumours in the groin. Upon each of these stones they make nine[8] marks, and remove one from the vessel daily, taking care, when the ninth day is come, to let the lizard go, the stones being kept as a remedy for affections of the eyes. Others, again, blind a green lizard, and after putting some earth beneath it, enclose it in a glass vessel, with some small rings of solid iron or gold. When they find, by looking through the glass, that the lizard has recovered its sight,[9] they set it at liberty, and keep the rings as a preservative against ophthalmia. Others employ the ashes of a lizard's head as a substitute for antimony, for the treatment of eruptions of the eyes. Some recommend the ashes of the green lizard with a long neck that is usually found in sandy soils, as an application for incipient defluxions of the eyes, and for glaucoma. They say, too, that if the eyes of a weasel are extracted with a pointed instrument, its sight will return; the same use being made of it as of the lizards and rings above mentioned. The right eye of a serpent, worn as an amulet, is very good, it is said, for defluxions of the eyes, due care being taken to set the serpent at liberty after extracting the eye. For continuous watering[10] of the eyes, the ashes of a spotted lizard's head, applied with antimony, are remarkably efficacious.

The cobweb of the common fly-spider, that which lines its hole more particularly, applied to the forehead across the temples, in a compress of some kind or other, is said to be marvellously useful for the cure of defluxions of the eyes: the web must be taken, however, and applied by the hands of a boy who has not arrived at the years of puberty; the boy, too, must not show himself to the patient for three days, and during those three days neither of them must touch the ground with his feet uncovered. The white spider[11] with

[7] See B. xxxvii. c. 56.

[8] The mention of this number denotes the Eastern origin of this remedy, Ajasson remarks.

[9] See Note 6 above.

[10] "Lacrymantibus sine fine oculis."

[11] Ajasson remarks, that Pliny has given here a much more exact description of the varieties of the Spider, than in the Eleventh Book. The learned Commentator gives an elaborate discussion, of eighteen pages, on the varieties of the Spider as known to the ancients in common with modern naturalists.

very elongated, thin, legs, beaten up in old oil, forms an ointment which is used for the cure of albugo. The spider, too, whose web, of remarkable thickness, is generally found adhering to the rafters of houses, applied in a piece of cloth, is said to be curative of defluxions of the eyes. The green scarabæus has the property of rendering the sight more piercing[12] of those who gaze upon it: hence it is that the engravers of precious stones use these insects to steady their sight.

CHAP. 39.—REMEDIES FOR PAINS AND DISEASES OF THE EARS.

A sheep's gall, mixed with honey, is a good detergent of the ears. Pains in those organs are allayed by injecting a bitch's milk; and hardness of hearing is removed by using dogs' fat, with wormwood and old oil, or else goose-grease. Some persons add juice of onions and of garlic,[12*] in equal proportions. The eggs, too, of ants are used, by themselves, for this purpose; these insects being possessed, in fact, of certain medicinal properties, and bears, it is well known, curing themselves when sick, by eating[13] them as food. Goose-grease, and indeed that of all birds, is prepared by removing all the veins and leaving the fat, in a new, shallow, earthen vessel, well covered, to melt in the sun, some boiling water being placed beneath it; which done, it is passed through linen strainers, and is then put by in a cool spot, in a new earthen vessel, for keeping: with the addition of honey it is less liable to turn rancid. Ashes of burnt mice, injected with honey or boiled with oil of roses, allay pains in the ears. In cases where an insect has got into the ears, a most excellent remedy is found in an injection of mouse gall, diluted with vinegar; where, too, water has made its way into the passages of the ear, goose-grease is used, in combination with juice of onions. Some persons skin a dormouse, and after removing the intestines boil the body in a new vessel with honey. Medical men, however, prefer boiling it down to one-third with nard, and recommend it to be kept in that state, and to be warmed when wanted, and injected with a syringe. It is a well-known fact, that this preparation is an

[12] Green is universally the colour least fatiguing to the eye.

[12*] See B. xx. c. 23.

[13] See B. vii. c. 27, and B. viii. c. 41. The formic acid which ants contain may possibly possess some medicinal properties.

effectual remedy for the most desperate maladies of the ears: the same, too, with an injection of earth-worms boiled with goose-grease. The red worms, also, that are found upon trees, beaten up with oil, are a most excellent remedy for ulcerations and ruptures of the ears. Lizards, which have been suspended for some time and dried, with salt in the mouth, are curative of contusions of the ears, and of injuries inflicted by blows: the most efficacious for this purpose are those which have iron-coloured spots upon the skin,[14] and are streaked with lines along the tail.

Millepedes, known also as "centipedes" or "multipedes," are insects belonging to the earth-worm genus, hairy, with numerous feet, forming curves as they crawl, and contracting themselves when touched: the Greeks give to this insect the name of "oniscos,"[15] others, again, that of "tylos." Boiled with leek-juice in a pomegranate rind, it is highly efficacious, they say, for pains in the ears; oil of roses being added to the preparation, and the mixture injected into the ear opposite to the one affected. As for that kind which does not describe a curve when moving, the Greeks give it the name of "seps," while others, again, call it "scolopendra;" it is smaller than the former one, and is injurious.[16] The snails which are commonly used as food, are applied to the ears with myrrh or powdered frankincense; and those with a small, broad, shell are employed with honey as a liniment for fractured ears. Old sloughs of serpents, burnt in a heated potsherd and mixed with oil of roses, are used as an injection for the ears, which is considered highly efficacious for all affections of those organs, and for offensive odours arising therefrom in particular. In cases where there is suppuration of the ears, vinegar is used, and it is still better if goat's gall, ox-gall, or that of the sea tortoise, is added. This slough, however, is good for nothing when more than a year old; the same, too, when it has been drenched with

[14] Ajasson suggests that this may be the Lacerta cœpium of Dandin, of a reddish brown colour, with two blackish lines running longitudinally along the back.

[15] This insect in reality is a woodlouse, whereas the millepedes previously described are evidently caterpillars. Woodlice are still swallowed alive by schoolboys, and old women are to be found who recommend them for consumption. Holland says that woodlice are good for pains in the ears.

[16] "Perniciosam."

rain, as some think. The thick pulp of a spider's body, mixed with oil of roses, is also used for the ears; or else the pulp applied by itself with saffron or in wool: a cricket, too, is dug up with some of its earth, and applied. Nigidius attributes great[17] virtues to this insect, and the magicians still greater, and all because it walks backwards, pierces the earth, and chirrups by night! The mode of catching it is by throwing an ant,[18] made fast with a hair, into its hole, the dust being first blown away to prevent it from concealing itself: the moment it seizes the ant, it is drawn out.

The dried craw of poultry, a part that is generally thrown away, is beaten up in wine, and injected warm, for suppurations of the ears; the same, too, with the grease of poultry.

On pulling off the head of a black beetle,[19] it yields a sort of greasy substance, which, beaten up with rose oil, is marvellously good, they say, for affections of the ears: care must be taken, however, to remove the wool very soon, or else this substance will be speedily transformed into an animal, in the shape of a small grub. Some writers assert that two or three of these insects, boiled in oil, are extremely efficacious for the ears; and that they are good, beaten up and applied in linen, for contusions of those organs.

This insect, also, is one of those that are of a disgusting character; but I am obliged, by the admiration which I feel for the operations of Nature, and for the careful researches of the ancients, to enter somewhat more at large upon it on the present occasion. Their writers have described several varieties of it; the soft beetle, for instance, which, boiled in oil, has been found by experience to be a very useful liniment for warts. Another kind, to which they have given the name of "mylœcon,"[20] is generally found in the vicinity of mills: deprived of the head, it has been found to be curative of leprosy —at least Musa[21] and Picton[22] have cited instances to that effect.

[17] In the middle ages there were many superstitions with reference to this insect, some of which have survived to the present day.

[18] Ajasson seems to think that this passage means that the ant *itself* adopts this plan of catching the cricket. If so, he is certainly in error, and his attack upon Pliny's credulity is, in this instance at least, misplaced.

[19] See B. xi. c. 34, and B. xxv. c. 60.

[20] "Inhabiting mills."

[21] See B. xix. c. 38, and B. xxv. c. 38.

[22] Of this writer nothing is known.

There is a third kind, again, odious for its abominable smell, and tapering at the posterior extremities. Used in combination with pisselæon,[23] it is curative, they say, of ulcers of a desperate nature, and, if kept applied for one-and-twenty days, for scrofulous sores and inflamed tumours. The legs and wings being first removed, it is employed for the cure of bruises, contusions, cancerous sores, itch-scabs, and boils—remedies, all of them, quite disgusting even to hear of. And yet, by Hercules! Diodorus[24] tells us that he has administered this remedy internally, with resin and honey, for jaundice and hardness of breathing; such unlimited power has the medical art to prescribe as a remedy whatever it thinks fit!

Physicians who keep more within bounds, recommend the ashes of these insects to be kept for these various purposes in a box made of horn; or else that they should be bruised and injected in a lavement for hardness of breathing and catarrhs. At all events, that, applied externally, they extract foreign substances adhering to the flesh, is a fact well known.

Honey, too, in which the bees have died, is remarkably useful for affections of the ears. Pigeons' dung, applied by itself, or with barley-meal or oat-meal, reduces imposthumes of the parotid glands; a result which is equally obtained by injecting into the ear an owlet's brains or liver, mixed with oil, or by applying the mixture to the parotid glands; also, by applying millepedes with one-third part of resin; by using crickets in the form of a liniment; or by wearing crickets attached to the body as an amulet. The other kinds of maladies, and the several remedies for them, derived from the same animals or from others of the same class, we shall describe in the succeeding Book.

SUMMARY. — Remedies, narratives, and observations, six hundred and twenty-one.

ROMAN AUTHORS QUOTED. — M. Varro,[25] L. Piso,[26] Flaccus Verrius,[27] Antias,[28] Nigidius,[29] Cassius Hemina,[30] Cicero,[31] Plautus,[32] Celsus,[33] Sextius Niger[34] who wrote in Greek, Cæci-

[23] See B. xxiv. c. 11.
[24] See the end of this Book.
[25] See end of B. ii.
[26] See end of B. ii.
[27] See end of B. iii.
[28] See end of B. ii.
[29] See end of B. vi.
[30] See end of B. xii.
[31] See end of B. vii.
[32] See end of B. xiv.
[33] See end of B. vii.
[34] See end of B. xii.

lius[35] the physician, Metellus Scipio,[36] the Poet Ovid,[37] Licinius Macer.[38]

FOREIGN AUTHORS QUOTED.—Homer, Aristotle,[39] Orpheus,[40] Palæphatus,[41] Democritus,[42] Anaxilaüs.[43]

MEDICAL AUTHORS QUOTED.—Botrys,[44] Apollodorus,[45] Archidemus,[46] Aristogenes,[47] Xenocrates,[48] Democrates,[49] Diodorus,[50] Chrysippus[51] the philosopher, Horus,[52] Nicander,[53] Apollonius[54] of Pitanæ.

[35] See end of B. xxviii. [36] See end of B. viii. [37] See end of B. xviii.
[38] See end of B. xix. [39] See end of B. ii. [40] See end of B. xx.

[41] There are four literary persons of this name mentioned by Suidas, who appears to give but a confused account of them. He speaks of an ancient poet of Athens of this name, who wrote a Cosmogony and other works; a native of Priene, to whom some attributed the work on "Incredible Stories," by most persons assigned to Palæphatus of Athens; an historian of Abydos, a contemporary of Alexander the Great, and a friend of Aristotle; and a grammarian of Athens of uncertain date, to whom the work on "Incredible Stories" is mostly assigned. But in the former editions of Pliny, the reading "Philopator" is mostly adopted; bearing reference, it has been suggested, to a Stoic philosopher and physician of that name mentioned by Galen, "On the Symptoms of Mental Diseases," c. 8.

[42] See end of B. ii. [43] See end of B. xxi. [44] See end of B. xiii.
[45] See end of B. xi. [46] See end of B. xii.

[47] There were two Greek physicians of this name, one of whom was a native of Thasos, and wrote several medical works. The other was a native of Cnidos, and, according to Suidas, a slave of the philosopher Chrysippus. Galen, however, says that he was a pupil of the physician of that name, and afterwards became physician to Antigonus Gonatas, king of Macedonia, B C. 283—239. Hardouin is of opinion that the two physicians were one and the same person.

[48] See end of B. xx.

[49] Servilius Democrates, a Greek physician at Rome about the time of the Christian era. He probably received his prænomen from being a client of the Servilian family. Pliny speaks of him in B. xxiv. c. 28, and B. xxv. c. 49. He wrote several works on medicine in Greek Iambic verse, the titles and a few extracts from which are preserved by Galen.

[50] Probably the same physician that is mentioned by Galen as belonging to the sect of the Empirici. See c. 39 of this Book.

[51] See end of B. xx.

[52] A fabulous king of Assyria, or Egypt, to whom was attributed the discovery of many remedies and medicaments. See B. xxx. c. 51, and B. xxxvii. c. 52.

[53] See end of B. viii.

[54] Beyond the mention made of his absurd remedy in c. 38 of the present Book, nothing seems to be known of this writer.

# BOOK XXX.

## REMEDIES DERIVED FROM LIVING CREATURES.

### CHAP. 1. (1.)—THE ORIGIN OF THE MAGIC ART.

In former parts of this work, I have had occasion more than once, when the subject demanded it, to refute the impostures of the magic art, and it is now my intention to continue still further my exposure thereof. Indeed, there are few subjects on which more might be profitably said, were it only that, being, as it is, the most deceptive of all known arts, it has exercised the greatest influence in every country and in nearly every age. And no one can be surprised at the extent of its influence and authority, when he reflects that by its own energies it has embraced, and thoroughly amalgamated with itself, the three other sciences[1] which hold the greatest sway upon the mind of man.

That it first originated in medicine, no one entertains a doubt;[2] or that, under the plausible guise of promoting health, it insinuated itself among mankind, as a higher and more holy branch of the medical art. Then, in the next place, to promises the most seductive and the most flattering, it has added all the resources of religion, a subject upon which, at the present day, man is still entirely in the dark. Last of all, to complete its universal sway, it has incorporated with itself the astrological art;[3] there being no man who is not desirous to know his future destiny, or who is not ready to believe that this knowledge may with the greatest certainty be obtained, by observing the face of the heavens. The senses of men being thus enthralled by a three-fold bond, the art of magic has attained an influence so mighty, that at the present day even, it holds sway throughout a great part of the world, and rules the kings[4] of kings in the East.

[1] "Artes." Medicine, religion, and the art of divination.
[2] Ajasson remarks that, on the contrary, this is a subject of great doubt.
[3] "Mathematicas artes."
[4] The title of the ancient kings of Persia.

CHAP. 2.—WHEN AND WHERE THE ART OF MAGIC ORIGINATED: BY WHAT PERSONS IT WAS FIRST PRACTISED.

There is no doubt that this art originated in Persia,[5] under Zoroaster,[6] this being a point upon which authors are generally agreed; but whether there was only one Zoroaster, or whether in later times there was a second person of that name, is a matter which still remains undecided. Eudoxus,[7] who has endeavoured to show that of all branches of philosophy the magic art is the most illustrious and the most beneficial, informs us that this Zoroaster existed six thousand years before the death of Plato, an assertion in which he is supported by Aristotle. Hermippus,[8] again, an author who has written with the greatest exactness on all particulars connected with this art, and has commented upon the two millions[9] of verses left by Zoroaster, besides completing indexes to his several works, has left a statement, that Agonaces was the name of the master from whom Zoroaster derived his doctrines, and that he lived five thousand years before the time of the Trojan War. The first thing, however, that must strike us with surprise, is the fact that this art, and the traditions connected with it, should have survived for so many ages, all written commentaries thereon having perished in the meanwhile; and this, too, when there was no continuous succession of adepts, no professors of note, to ensure their transmission.

For how few there are, in fact, who know anything, even by hearsay, about the only professors of this art whose names have come down to us, Apusorus[10] and Zaratus of Media, Marmarus and Arabantiphocus of Babylonia, and Tarmoendas of Assyria, men who have left not the slightest memorials of their existence. But the most surprising thing of all is, that

[5] Or Bactriana, more properly.

[6] Magic, no doubt, has been the subject of belief from the earliest times, whatever may have been the age of Zoroaster, the Zarathustra of the Zendavesta, and the Zerdusht of the Persians. In the Zendavesta he is represented as living in the reign of Gushtasp, generally identified with Darius Hystaspes. He probably lived at a period anterior to that of the Median and Persian kings. Niebuhr regards him as a purely mythical personage

[7] See end of B. ii. [8] See end of this Book.

[9] An exaggeration, of Oriental origin, most probably.

[10] These names have all, most probably, been transmitted to us in a corrupted form. Ajasson gives some suggestions as to their probable Eastern form and origin.

Homer should be totally silent upon this art in his account[11] of the Trojan War, while in his story of the wanderings of Ulysses, so much of the work should be taken up with it, that we may justly conclude that the poem is based upon nothing else; if, indeed, we are willing to grant that his accounts of Proteus and of the songs of the Sirens are to be understood in this sense, and that the stories of Circe and of the summoning up of the shades below,[12] bear reference solely to the practices of sorcerers. And then, too, to come to more recent times, no one has told us how the art of sorcery reached Telmessus,[13] a city devoted to all the services of religion, or at what period it came over and reached the matrons of Thessaly; whose name[14] has long passed, in our part of the world, as the appellation of those who practise an art, originally introduced among themselves even, from foreign lands.[15] For in the days of the Trojan War, Thessaly was still contented with such remedies[16] as she owed to the skill of Chiron, and her only[17] lightnings were the lightnings hurled by Mars.[18] Indeed, for my own part, I am surprised that the imputation of magical practices should have so strongly attached to the people once under the sway of Achilles, that Menander even, a man unrivalled for perception in literary knowledge, has entitled one of his Comedies "The Thessalian Matron," and has therein described the devices practised by the females of that country in bringing down the moon from the heavens.[18*] I should have been inclined to think that Orpheus had been the first to introduce into a country so near his own, certain magical superstitions based upon the practice of medicine, were it not the fact that Thrace, his native land, was at that time totally a stranger to the magic art.

[11] One among the many proofs, Ajasson says, that the Iliad and the Odyssey belong to totally different periods.

[12] In reference to the Tenth Book of the Odyssey.

[13] See B. v. cc. 28, 29. Cicero mentions a college of Aruspices established at this city.

[14] The name "Thessala" was commonly used by the Romans to signify an enchantress, sorceress, or witch. See the story of Apuleius, Books i. and iii.

[15] The countries of the East.

[16] Purely medicinal remedies.

[17] In contradistinction to lightnings elicited by the practice of Magic.

[18] A poetical figure, alluding to the "thunderbolts of war," as wielded probably by Achilles and other heroes of Thessaly.

[18*] See B. ii. c. 9.

The first person, so far as I can ascertain, who wrote upon magic, and whose works are still in existence, was Osthanes,[19] who accompanied Xerxes, the Persian king, in his expedition against Greece. It was he who first[20] disseminated, as it were, the germs of this monstrous art, and tainted therewith all parts of the world through which the Persians passed. Authors who have made diligent enquiries into this subject, make mention of a second Zoroaster, a native of Proconnesus, as living a little before the time of Osthanes. That it was this same Osthanes, more particularly, that inspired the Greeks, not with a fondness only, but a rage, for the art of magic, is a fact beyond all doubt: though at the same time I would remark, that in the most ancient times, and indeed almost invariably, it was in this[21] branch of science, that was sought the highest point of celebrity and of literary renown. At all events, Pythagoras, we find, Empedocles, Democritus, and Plato, crossed the seas, in order to attain a knowledge thereof, submitting, to speak the truth, more to the evils of exile[22] than to the mere inconveniences of travel. Returning home, it was upon the praises of this art that they expatiated—it was this that they held as one of their grandest mysteries. It was Democritus, too, who first drew attention to Apollobeches[23] of Coptos, to Dardanus,[24] and to Phœnix: the works of Dardanus he sought in the tomb of that personage, and his own were composed in accordance with the doctrines there found. That these doctrines should have been received by any portion of mankind, and transmitted to us by the aid of memory, is to me surprising beyond anything I can conceive.[25] All the particulars there found are so utterly incredible, so utterly re-

[19] Ajasson queries whether this is a proper name, or an epithet merely.

[20] Ajasson combats this assertion at considerable length, and with good reason. It is quite inadmissible.

[21] The mysteries of philosophy, as Ajasson remarks, were not necessarily identical with the magic art.

[22] In reality, Pythagoras was an exile from the tyranny of the ruler of Samos, Plato from the court of Dionysius the Younger, and Democritus from the ignorance of his fellow-countrymen of Abdera. There is no doubt that Pythagoras and Democritus made considerable researches into the art of magic as practised in the East.

[23] Nothing is known of this writer.

[24] Dardanus, the ancestor of the Trojans, if he is the person here meant, is said to have introduced the worship of the gods into Samothrace.

[25] The works of Homer were transmitted in a similar manner.

volting, that those even who admire Democritus in other respects, are strong in their denial that these works were really written by him. Their denial, however, is in vain; for it was he, beyond all doubt, who had the greatest share in fascinating men's minds with these attractive chimæras.

There is also a marvellous coincidence, in the fact that the two arts — medicine, I mean, and magic — were developed simultaneously: medicine by the writings of Hippocrates, and magic by the works of Democritus, about the period of the Peloponnesian War, which was waged in Greece in the year of the City of Rome 300.

There is another sect, also, of adepts in the magic art, who derive their origin from Moses,[26] Jannes,[27] and Lotapea,[28] Jews by birth,[29] but many thousand years posterior to Zoroaster: and as much more recent, again, is the branch of magic cultivated in Cyprus.[30] In the time, too, of Alexander the Great, this profession received no small accession to its credit from the influence of a second Osthanes, who had the honour of accompanying that prince in his expeditions, and who, evidently, beyond all doubt, travelled[31] over every part of the world.

### CHAP. 3.—WHETHER MAGIC WAS EVER PRACTISED IN ITALY. AT WHAT PERIOD THE SENATE FIRST FORBADE HUMAN SACRIFICES.

It is clear that there are early traces still existing of the

[26] Moses, no doubt, was represented by the Egyptian priesthood as a magician, in reference more particularly to the miracles wrought by him before Pharaoh. From them the Greeks would receive the notion.

[27] In 2 Tim. iii. 8, we find the words, "Now as Jannes and Jambres withstood Moses, so do these also resist the truth." Eusebius, in his *Præparatio Evangelica*, B. ix., states that Jannes and Jambres, or Mambres, were the names of Egyptian writers, who practised Magic, and opposed Moses before Pharaoh. This contest was probably represented by the Egyptian priesthood as merely a dispute between two antagonistic schools of Magic.

[28] Of this person nothing is known. The former editions mostly have "Jotapea." "Jotapata" was the name of a town in Syria, the birthplace of Josephus.

[29] He is mistaken here as to the nation to which Jannes belonged.

[30] By some it has been supposed that this bears reference to Christianity, as introduced into Cyprus by the Apostle Barnabas Owing to the miracles wrought in the infancy of the Church, the religion of the Christians was very generally looked upon as a sort of Magic. The point is very doubtful.

[31] His itinerary, Ajasson remarks, would have been a great curiosity.

introduction of magic into Italy; in our laws of the Twelve Tables for instance; besides other convincing proofs, which I have already noticed in a preceding Book,[32] At last, in the year of the City 657, Cneius Cornelius Lentulus and P. Licinius Crassus being consuls, a decree forbidding human sacrifices[33] was passed by the senate; from which period the celebration of these horrid rites ceased in public, and, for some[34] time, altogether.

### CHAP. 4.—THE DRUIDS OF THE GALLIC PROVINCES.

The Gallic provinces, too, were pervaded by the magic art,[35] and that even down to a period within memory; for it was the Emperor Tiberius that put down their Druids,[36] and all that tribe of wizards and physicians. But why make further mention of these prohibitions, with reference to an art which has now crossed the very Ocean even, and has penetrated to the void[37] recesses of Nature? At the present day, struck with fascination, Britannia still cultivates this art, and that, with ceremonials so august, that she might almost seem[38] to have been the first to communicate them to the people of Persia.[39] To such a degree are nations throughout the whole world, totally different as they are and quite unknown to one another, in accord upon this one point!

[32] B. xxviii. c. 4.

[33] These sacrifices forming the most august rite of the Magic art, as practised in Italy.

[34] That this art was still practised in secret in the days of Pliny himself, we learn from the testimony of Tacitus (Annals, II. 69), in his account of the enquiries instituted on the death of Germanicus.

[35] More particularly in the worship of their divinity Heu or Hesus, the god of war.

[36] This he did officially, but not effectually, and the Druids survived as a class for many centuries both in Gaul and Britain.

[37] He alludes to the British shores bordering on the Atlantic. See B. xix. c. 2.

[38] It is a curious fact that the round towers of Ireland bear a strong resemblance to those, the ruins of which are still to be seen on the plains of ancient Persia.

[39] "Ut dedisse Persis videri possit." This might possibly mean, "That Persia might almost seem to have communicated it direct to Britain." Ajasson enumerates the following superstitions of ancient Britain, as bearing probable marks of an Oriental origin: the worship of the stars, lakes, forests, and rivers; the ceremonials used in cutting the plants samiolus, selago, and mistletoe, and the virtues attributed to the adder's egg.

Such being the fact, then, we cannot too highly appreciate the obligation that is due to the Roman people, for having put an end to those monstrous rites, in accordance with which, to murder a man was to do an act of the greatest devoutness, and to eat [40] his flesh was to secure the highest blessings of health.

### CHAP. 5. (2.)—THE VARIOUS BRANCHES OF MAGIC.

According to what Osthanes tells us, there are numerous sorts of magic. It is practised [41] with water, for instance, with balls, by the aid of the air, of the stars, of lamps, basins, hatchets, and numerous other appliances; means by which it engages to grant a foreknowledge of things to come, as well as converse with ghosts and spirits of the dead. All these practices, however, have been proved by the Emperor Nero, in our own day, to be so many false and chimærical illusions; entertaining as he did a passion for the magic art, unsurpassed even by his enthusiastic love for the music of the lyre, and for the songs of tragedy; so strangely did his elevation to the highest point of human fortune act upon the deep-seated vices of his mind! It was his leading desire to command the gods of heaven, and no aspiration could he conceive more noble than this. Never did person lavish more favours upon any one of the arts; and for the attainment of this, his favourite object, nothing was wanting to him, neither riches, nor power, nor aptitude at learning, and what not besides, at the expense of a suffering world.

It is a boundless, an indubitable proof, I say, of the utter falsity of this art, that such a man as Nero abandoned it; and would to heaven that he had consulted the shades below, and any other spirits as well, in order to be certified in his suspicions, rather than commissioned the denizens of stews and brothels to make those inquisitions of his [with reference to the objects of his jealousy]. For assuredly there can be no

[40] Ajasson seems inclined to suggest that this may possibly bear reference to the Christian doctrines of redemption and the Sacrament of the Lord's Supper.

[41] These kinds of divination, rather than magic, were called hydromancy, sphæromancy, aëromancy, astromancy, lychnomancy, lecanomancy, and axinomancy. See Rabelais, B. iii. c. 25, where a very full account is given of the Magic Art, as practised by the ancients. Coffee-grounds, glair of eggs, and rose-leaves, are still used in France for purposes of divination by the superstitious.

superstition, however barbarous and ferocious the rites which it sanctions, that is not more tolerant than the imaginations which he conceived, and owing to which, by a series of blood-stained crimes, our abodes were peopled with ghosts.

CHAP. 6.—THE SUBTERFUGES PRACTISED BY THE MAGICIANS.

The magicians, too, have certain modes of evasion, as, for instance, that the gods will not obey, or even appear to, persons who have freckles upon the skin. Was this perchance the obstacle[42] in Nero's way? As for his limbs, there was[43] nothing deficient in them. And then, besides, he was at liberty to make choice of the days prescribed by the magic ritual: it was an easy thing for him to make choice of sheep whose colour was no other than perfectly black: and as to sacrificing human beings, there was nothing in the world that gave him greater pleasure. The Magian Tiridates[44] was at his court, having repaired thither, in token of our triumph over Armenia, accompanied by a train which cost dear to the provinces through which it passed. For the fact was, that he was unwilling to travel by water, it being a maxim with the adepts in this art that it is improper to spit into the sea or to profane that element by any other of the evacuations that are inseparable from the infirmities of human nature. He brought with him, too, several other Magi, and went so far as to initiate the emperor in the repasts[45] of the craft; and yet the prince, for all he had bestowed a kingdom upon the stranger, found himself unable to receive at his hands, in return, this art.

We may rest fully persuaded then, that magic is a thing detestable in itself. Frivolous and lying as it is, it still bears, however, some shadow of truth upon it; though reflected, in reality, by the practices of those who study the arts of secret poisoning, and not the pursuits of magic. Let any one picture to himself the lies of the magicians of former days, when he learns what has been stated by the grammarian Apion,[46] a

[42] Suetonius says that his body was full of foul spots.

[43] It was probably a doctrine of Magic, that an adept must not be deficient in any of his limbs.

[44] After being conquered by the Roman general, Corbulo, he received the crown of Armenia from Nero, A.D. 63.

[45] All vegetable substances were divided, according to their doctrine, into the pure and the impure, the rule being strictly observed at their repasts.

[46] See end of this Book.

person whom I remember seeing myself when young. He tells us that the plant cynocephalia,[47] known in Egypt as "osiritis," is useful for divination, and is a preservative against all the malpractices of magic, but that if a person takes it out of the ground entire, he will die upon the spot. He asserts, also, that he himself had raised the spirits[48] of the dead, in order to make enquiry of Homer in reference to his native country and his parents; but he does not dare, he tells us, disclose the answer he received.

### CHAP. 7. (3.)—OPINIONS OF THE MAGICIANS RELATIVE TO THE MOLE. FIVE REMEDIES DERIVED FROM IT.

Let the following stand as a remarkable proof of the frivolous nature of the magic art. Of all animals it is the mole that the magicians admire most! a creature that has been stamped with condemnation by Nature in so many ways; doomed as it is to perpetual blindness,[49] and adding to this darkness a life of gloom in the depths of the earth, and a state more nearly resembling that of the dead and buried. There is no animal in the entrails of which they put such implicit faith, no animal, they think, better suited for the rites of religion; so much so, indeed, that if a person swallows the heart of a mole, fresh from the body and still palpitating, he will receive the gift of divination, they assure us, and a foreknowledge of future events. Tooth-ache, they assert, may be cured by taking the tooth of a live mole, and attaching it to the body. As to other statements of theirs relative to this animal, we shall draw attention to them on the fitting occasions, and shall only add here that one of the most probable of all their assertions is, that the mole neutralizes the bite of the shrew-mouse; seeing that, as already[50] stated, the very earth even that is found in the rut of a cart-wheel, acts as a remedy in such a case.

[47] See B. xxv. c. 80.

[48] Like the assertions of the famous impostor of the close of the last century, Count Cagliostro.

[49] A mistake, of course; and one for which there is little excuse, as its eyes are easily perceptible. It is not improbable, however, that it was an impression with the ancients that its sight is impeded by the horny covering of its eyes.

[50] In B. xxix. c. 27.

CHAP. 8.—THE OTHER REMEDIES DERIVED FROM LIVING CREATURES, CLASSIFIED ACCORDING TO THE RESPECTIVE DISEASES. REMEDIES FOR TOOTH-ACHE.

But to proceed with the remedies for tooth-ache—the magicians tell us, that it may be cured by using the ashes of the head of a dog that has died in a state of madness. The head, however, must be burnt without the flesh, and the ashes injected with oil of cyprus[51] into the ear on the side affected. For the same purpose also, the left eye-tooth of a dog is used, the gum of the affected tooth being lanced with it; one of the vertebræ also of a dragon or of an enhydris, which is a male white serpent.[52] The eye-tooth, too, of this last, is used for scarifying the gums; and when the pain affects the teeth of the upper jaw, they attach to the patient two of the upper teeth of the serpent, and, similarly, two of the lower ones for tooth-ache in the lower jaw. Persons who go in pursuit of the crocodile, anoint themselves with the fat of this animal. The gums are also scarified with the frontal bones of a lizard, taken from it at full moon, and not allowed to touch the ground: or else the mouth is rinsed with a decoction of dogs' teeth in wine, boiled down to one half.

Ashes of dogs' teeth, mixed with honey, are useful for difficult dentition in children, and a dentifrice is similarly prepared from them. Hollow teeth are plugged with ashes of burnt mouse-dung, or with a lizard's liver, dried. To eat a snake's heart, or to wear it, attached to the body, is considered highly efficacious. There are some among the magicians, who recommend a mouse to be eaten twice a month, as a preventive of tooth-ache. Earth-worms, boiled in oil and injected into the ear on the side affected, afford considerable relief: ashes, too, of burnt earth-worms, introduced into carious teeth, make them come out easily; and, used as a friction, they allay pains in such of the teeth as are sound: the proper way of burning them is in an earthen potsherd. They are useful, too, boiled with root of the mulberry-tree in squill vinegar, and employed as a collutory for the teeth. The small worm that is found in the plant known as Venus'[53] bath, is remarkably useful,

[51] See B. xii. c. 51.

[52] It is doubtful what is meant by this male white "water-serpent." In B. xxxii. c. 26, he appears to include it among the fishes.

[53] See B. xxv. c. 108.

introduced[54] into a hollow tooth; and as to the cabbage caterpillar, it will make hollow teeth come out, by the mere contact only. The bugs[55] that are found upon mallows, are injected into the ears, beaten up with oil of roses.

The small grits of sand that are found in the horns of snails introduced into hollow teeth, remove the pain instantaneously. Ashes of empty snail-shells, mixed with myrrh,[56] are good for the gums; the ashes also of a serpent, burnt with salt in an earthen pot, and injected, with oil of roses, into the ear opposite to the side affected; or else the slough of a snake, warmed with oil and torch-pine resin,[57] and injected into either ear. Some persons add frankincense and oil of roses, a preparation which, of itself, introduced into hollow teeth, makes them come out without pain. It is all a fiction, in my opinion, to say that white snakes cast this slough about the rising of the Dog-star; for such a thing has never been seen in Italy, and it is still more improbable that sloughing should take place at so late a period in the warmer climates. We find it stated also, that this slough, even when it has been kept for some time, mixed with wax, will extract a tooth very expeditiously, if applied thereto: a snake's tooth, also, attached to the body as an amulet, allays tooth-ache. Some persons think that it is a good remedy to catch a spider with the left hand, to beat it up with oil of roses, and then to inject it into the ear on the side affected.

The small bones of poultry, preserved in a hole in a wall, the medullary channel being left intact, will immediately cure tooth-ache, they say, if the tooth is touched or the gum scarified therewith, care being taken to throw away the bone the moment the operation is performed. A similar result is obtained by using raven's dung, wrapped in wool and attached to the body, or else sparrow's dung, warmed with oil and injected into the ear on the side affected. This last remedy, however, is productive of an intolerable itching, for which reason it is considered a better plan to rub the part with the ashes of young sparrows burnt upon twigs, mixed with vinegar for the purpose.

[54] It is a singular thing that we still hear of the maggots found in filberts being used for the same purpose.

[55] See B. xxix. c. 17.

[56] Marcus Empiricus says, honey.

[57] See B. xvi. c. 19.

CHAP. 9. (4.)—REMEDIES FOR OFFENSIVE ODOURS AND SORES OF THE MOUTH.

To impart sweetness to the breath, it is recommended to rub the teeth with ashes of burnt mouse-dung and honey: some persons are in the habit of mixing fennel root. To pick the teeth with a vulture's feather, is productive of a sour breath; but to use a porcupine's quill for that purpose, greatly strengthens the teeth. Ulcers of the tongue and lips are cured by taking a decoction of swallows, boiled in honied wine; and chapped lips are healed by using goose-grease or poultry-grease, wool-grease mixed with nut-galls, white spiders' webs, or the fine cobwebs that are found adhering to the beams of roofs. If the inside of the mouth has been scalded with any hot substance, bitches' milk will afford an immediate cure.

CHAP. 10.—REMEDIES FOR SPOTS UPON THE FACE.

Wool-grease, mixed with Corsican honey—which by the way is considered the most acrid honey of all—removes spots upon the face. Applied with oil of roses in wool, it causes scurf upon the face to disappear: some persons add butter to it. In cases of morphew, the spots are first pricked with a needle, and then rubbed with dog's gall. For livid spots and bruises on the face, the lights of a ram or sheep are cut fine and applied warm, or else pigeons' dung is used. Goose-grease or poultry-grease is a good preservative of the skin of the face. For lichens a liniment is used, made of mouse-dung in vinegar, or of the ashes of a hedge-hog mixed with oil: but, when these remedies are employed, it is recommended first to foment the face with nitre dissolved in vinegar. Maladies of the face are also removed by employing the ashes of the small, broad, snail that is so commonly found, mixed with honey. Indeed, the ashes of all snails are of an inspissative nature, and are possessed of certain calorific and detersive properties: hence it is that they form an ingredient in caustic applications, and are used in the form of a liniment for itch-scabs, leprous sores, and freckles on the face.

I find it stated that a certain kind of ant known by the name of "Herculanea,"[58] is beaten up, with the addition of a little

[58] Dalechamps thinks that these "Herculean" ants were so called from their great size. Ajasson queries whether they may not be the "grenadier ants" of Dupont de Nemours.

salt, and used for the cure of these diseases. The buprestis[59] is an insect but rarely found in Italy, and very similar to a scarabæus, with long legs. Concealed among the grass, it is very liable to be swallowed unobserved, by oxen in particular; and the moment it comes in contact with the gall, it causes such a degree of inflammation, that the animal bursts asunder; a circumstance to which the insect owes its name. Applied topically with he-goat suet, it removes lichens on the face, owing to its corrosive properties, as previously[60] stated. A vulture's blood, beaten up with cedar resin and root of white chamæleon—a plant which we have already[61] mentioned—and covered with a cabbage leaf, when applied, is good for the cure of leprosy; the same, too, with the legs of locusts, beaten up with he-goat suet. Pimples are treated with poultry grease, beaten up and kneaded with onions. One very useful substance for the face is honey in which the bees have died; but a sovereign detergent for that part is swans' grease, which has also the property of effacing wrinkles. Brand-marks[62] are removed by using pigeons' dung, diluted in vinegar.

### CHAP. 11.—REMEDIES FOR AFFECTIONS OF THE THROAT.

I find it stated that catarrhs oppressive to the head may be cured by the patient kissing a mule's nostrils. Affections of the uvula and pains in the fauces are alleviated by using the dung of lambs before they have begun to graze, dried in the shade. Diseases of the uvula are cured with the juices of a snail pierced with a needle; the snail, however, must be then hung up in the smoke. The same maladies are treated also with ashes of burnt swallows, mixed with honey; a preparation which is equally good for affections of the tonsillary glands. Sheep's milk, used as a gargle, alleviates diseases of the fauces and tonsillary glands. Millepedes, bruised with pigeons' dung, are taken as a gargle, with raisin wine; and they are applied, externally, with dried figs and nitre, for the purpose of soothing roughness of the fauces and catarrhs. For such cases, too, snails should be boiled unwashed, the earth only being removed, and then pounded and administered to the patient in raisin wine. Some persons are of opinion that for these pur-

[59] See B. xxii. c. 36. Belon takes it to be the Lixus paraplecticus.
[60] In B. xxix. c. 30. [61] In B. xxii. c. 21. [62] "Stigmata."

poses the snails of Astypalæa[63] are the most efficacious, and they give the preference to the detersive preparation[64] made from them. The parts affected are sometimes rubbed with a cricket, and affections of the tonsillary glands are alleviated by being rubbed with the hands of a person who has bruised a cricket.

### CHAP. 12.—REMEDIES FOR QUINZY AND SCROFULA.

For quinzy we have very expeditious remedies in goose-gall, mixed with elaterium[65] and honey, an owlet's brains, or the ashes of a burnt swallow, taken in warm water; which last remedy we owe[66] to the poet Ovid. But of all the remedies spoken of as furnished by the swallow, one of the most efficacious is that derived from the young of the wild swallow, a bird which may be easily recognized by the peculiar conformation of its nest.[67] By far the most effectual, however, of them all, are the young of the bank-swallow,[68] that being the name given to the kind which builds its nest in holes on the banks of rivers. Many persons recommend the young of any kind of swallow as a food, assuring us that the person who takes it need be in no apprehension of quinzy for the whole of the ensuing year. The young of this bird are sometimes stifled and then burnt in a vessel with the blood, the ashes being administered to the patient with bread or in the drink: some, however, mix with them the ashes of a burnt weasel, in equal proportion. The same remedies are recommended also for scrofula, and they are administered for epilepsy, once a day, in drink. Swallows preserved in salt are taken for quinzy, in doses of one drachma, in drink: the nest,[69] too, of the bird, taken internally, is said to be a cure for the same disease.

Millepedes,[70] it is thought, used in the form of a liniment, are peculiarly efficacious for quinzy: some persons, also, administer eleven of them, bruised in one semi-sextarius of hydromel, through a reed, they being of no use whatever if once touched by the teeth. Other remedies mentioned are, the broth of a

[63] See B. iv. c. 23, B. viii. c. 59, and cc. 15 and 43 of the present Book.
[64] "Smegma."
[65] See B. xx. c. 2.
[66] No very great obligation, apparently.
[67] See B. x. c. 49.
[68] "Riparia."
[69] The only birds' nests that are *now* taken internally are the *soutton bourong*, or, edible birds' nests, of the Chinese.
[70] See B. xxix. c. 39.

mouse boiled with vervain, a thong of dogskin passed three times round the back, and pigeons' dung mixed with wine and oil. For the cure of rigidity of the muscles of the neck, and of opisthotony, a twig of vitex, taken from a kite's nest, is attached to the body as an amulet.

(5.) For ulcerated scrofula, a weasel's blood is employed, or the animal itself, boiled in wine; but not in cases where the tumours have been opened with the knife. It is said, too, that a weasel, eaten with the food, is productive of a similar effect; sometimes, also, it is burnt upon twigs, and the ashes are applied with axle-grease. In some instances, a green lizard is attached to the body of the patient, a fresh one being substituted at the end of thirty days. Some persons preserve the heart of this animal in a small silver vessel,[71] as a cure for scrofula in females. Old snails, those found adhering to shrubs more particularly, are pounded with the shells on, and applied as a liniment. Asps, too, are similarly employed, reduced to ashes and mixed with bull suet; snakes' fat also, diluted with oil; and the ashes of a burnt snake, applied with oil or wax. It is a good plan also, in cases of scrofula, to eat the middle of a snake, the extremities being first removed, or to drink the ashes of the reptile, similarly prepared and burnt in a new earthen vessel: they will be found much more efficacious, however, when the snake has been killed between the ruts made by wheels. It is recommended also, to dig up a cricket with the earth about its hole, and to apply it in the form of a liniment; to use pigeons' dung, either by itself, or with barley-meal, or oatmeal and vinegar; or else to apply the ashes of a burnt mole, mixed with honey.

Some persons apply the liver of this last animal, crumbled in the hands, due care being taken not to wash it off for three days: it is said, too, that a mole's right foot is a remedy for scrofula. Others, again, cut off the head of a mole, and after kneading it with earth thrown up by those animals, divide it into tablets, and keep it in a pewter box, for the treatment of all kinds of tumours, diseases of the neck, and the affections known as "apostemes:" in all such cases the use of swine's

[71] Marcus Empiricus says that the heart must be enclosed in a silver lupine and worn suspended from the neck, being efficacious for scrofula both in males and females. The silver lupine was probably what we should call a "locket."

flesh is forbidden to the patient. "Taurus"[72] is the name usually given to an earth-beetle, very similar to a tick in appearance, and which it derives from the diminutive horns with which it is furnished: some persons call it the "earth-louse."[73] From the earth thrown up by these insects a liniment is prepared for scrofula and similar diseases, and for gout, the application not being washed off till the end of three days. This last remedy is effectual for a whole year, and all those other properties are attributed to it which we have mentioned[74] when speaking of crickets. There are some, again, who make a similar use of the earth thrown up by ants; while others attach to the patient as many earth-worms as there are scrofulous tumours, the sores drying as the worms dry up.

Some persons cut off the head and tail of a viper, as already mentioned,[75] about the rising of the Dog-star, which done, they burn the middle, and give a pinch of the ashes in three fingers, for thrice seven days, in drink—such is the plan they use for the cure of scrofula. Others, again, pass round the scrofulous tumours a linen thread, with which a viper has been suspended by the neck till dead. Millepedes[76] are also used, with one fourth part of turpentine; a remedy which is equally recommended for the cure of all kinds of apostemes.

### CHAP. 13.—REMEDIES FOR DISEASES OF THE SHOULDERS.

The ashes of a burnt weasel, mixed with wax, are a cure for pains in the shoulders. To prevent the arm-pits of young persons from becoming hairy, they should be well rubbed with ants' eggs. Slave-dealers also, to impede the growth of the hair in young persons near puberty, employ the blood that

[72] "The bull." Dalechamps takes this to be the stag-beetle or bull-fly; but that, as Ajasson remarks, has four horns, two antennæ, and two large mandibules; in addition to which, from its size, it would hardly be called the "earth-louse." He concludes that a lamellicorn is meant; but whether belonging to the Lucanidæ or the Scarabæidæ, it is impossible to say.

[73] "Pediculus terræ."

[74] In B. xxix. c. 33.

[75] In B. xxix. c. 21.

[76] He probably speaks of woodlice here. Ettmuller asserts their utility in this form for scrofula. Valisnieri says the same; Spielmann prescribes them for arthrosis; Riviere considers them as a detergent for ulcers, and a resolvent for tumours of the mamillæ; and Baglivi maintains that they are a first-rate diuretic, and unequalled as a lithontriptic. They contain muriate of lime and of potash, which may possibly, in some small degree, give them an aperitive virtue.

flows from the testes of lambs when castrated. This blood, too, applied to the arm-pits,[77] the hairs being first pulled out, is a preventive of the rank smell of those parts.

### CHAP. 14.—REMEDIES FOR PAINS IN THE VISCERA.

We give the one general name of "præcordia" to the human viscera; for pains in any part of which, a sucking whelp is applied, being pressed close to the part affected.[78] The malady, it is said, will in such case pass into the animal; a fact which may be satisfactorily ascertained; for on disembowelling it, and sprinkling the entrails with wine, that part of the viscera will be found affected in which the patient himself was sensible of pain: to bury the animal in such a case is a point most religiously observed. The dogs,[79] too, which we call "Melitæi," applied to the stomach every now and then, allay pains in that region: the malady, it is supposed, passes into the animal's body, as it gradually loses its health, and it mostly dies.

(6.) Affections of the lungs are cured by using mice, those of Africa more particularly, the animal being skinned and boiled in salt and oil, and then taken with the food. The same preparation is used also, for the cure of purulent or bloody expectorations.

### CHAP. 15.—REMEDIES FOR PAINS IN THE STOMACH.

One of the very best remedies for affections of the stomach, is to use a snail diet.[80] They must first be left to simmer in water for some time, without touching the contents of the shell, after which, without any other addition, they must be grilled upon hot coals, and eaten with wine and garum;[81] the snails of Africa being the best of all for the purpose. The efficacy of this remedy has been proved in numerous instances of late. Another point, too, to be observed, is to take an uneven number of them. Snails, however, have a juice, it should be remembered, which imparts to the breath an offensive smell.

[77] See Horace, Epode xii. l. 5.

[78] Hence, perhaps, the practice of nursing lap-dogs.

[79] See B. iii. c. 30, and Note 2, p. 267.

[80] In France and Italy, snails are considered a delicacy by some. Snail milk is sometimes used medicinally in England for consumptive patients: it is doubtful with what effect.

[81] Or fish-sauce. See B. xxxi. c. 43.

For patients troubled with spitting of blood, they are remarkably good, the shell being first removed, and the contents bruised and administered in water. The most esteemed kinds of all are those of Africa—those which come from Iol,[82] in particular—of Astypalæa, and, after them, those of Ætna, in Sicily, those I mean of moderate size, for the large ones are hard, and destitute of juice. The Balearic snails, called "cavaticæ," from being found in caverns, are much esteemed; and so, too, are those from the islands of Capreæ.[83] Those of Greece, on the other hand, are never used for food, either old or fresh.

River snails, and those with a white shell, have a strong, rank, juice, and forest snails are by no means good for the stomach, having a laxative effect upon the bowels; the same, too, with all kinds of small snails. Sea-snails,[84] on the other hand, are more beneficial to the stomach; but it is for pains in that region that they are found the most efficacious: the best plan, it is said, is to eat them alive, of whatever kind they may happen to be, with vinegar. In addition to these, there are the snails called "ceratæ,"[85] with a broad shell, and found in numerous localities: of the uses to which they are put we shall[86] speak further on the appropriate occasions. The craw of poultry, dried and sprinkled in the drink, or else used fresh and grilled, has a soothing effect upon pectoral catarrhs and coughs attended with phlegm.[87] Snails, beaten up raw and taken in three cyathi of warm water, allay cough. A piece of dog's skin, wrapped round any one of the fingers, affords relief to patients suffering from catarrh. A broth made of boiled partridges is strengthening for the stomach.

### CHAP. 16.—REMEDIES FOR PAINS IN THE LIVER, AND FOR SPITTING OF BLOOD.

For the cure of pains in the liver, a wild weasel is taken with the food, or the liver only of that animal; a ferret also, roasted like a sucking-pig. In cases of asthma, millepedes are used, thrice seven of them being soaked in Attic honey,

[82] See B. v. c. 20. [83] See B. iii. c. 12. [84] Our periwinkles.
[85] Dalechamps takes this to mean "without horns:" and Hardouin is of opinion that it means "genuine" or "unmixed." In either sense, the word is derived from the Greek.
[86] He has omitted to do so. [87] "Humida tussis."

and taken internally by the aid of a reed:[88] for all vessels, it should be remembered, turn black on coming in contact with them. Some persons grill one sextarius of these insects on a flat pan, till they become white, and then mix them with honey. There are some authorities who call this insect a "centipede," and recommend it to be given in warm water. Snails are administered to persons subject to fainting fits, alienation of the senses, and vertigo: for which purposes, a snail is beaten up, shell and all, with three cyathi of raisin wine, and the mixture is administered warm with the drink, for nine days at most. Others, again, give one snail the first day, two the second, three the third, two the fourth, and one the fifth; a mode of treatment also adopted for the cure of asthma and of abscesses.

There is, according to some authorities, an insect resembling the locust in appearance, destitute of wings, and known by the Greek name of "troxallis," it being without a name in Latin: a considerable number of writers, however, consider it as identical with the insect known to us as "gryllus."[89] Twenty of these insects, they say, should be grilled, and taken in honied wine, by patients troubled with hardness of breathing or spitting of blood. Some persons pour pure grape-juice,[90] or sea-water, upon unwashed snails, and then boil and eat them for food; or else they bruise the snails, shells and all, and take them with this grape-juice. A similar method is also adopted for the cure of cough. Honey in which the bees have died, is particularly good for the cure of abscesses. For spitting of blood a vulture's lungs are used, burnt upon vine logs, and mixed with half the quantity of pomegranate blossoms, or with the same proportion of quince and lily blossom: the whole being taken morning and evening, in wine, if there is no fever; but where there are symptoms of fever, instead of wine, water is used in which quinces have been boiled.

### CHAP. 17.—REMEDIES FOR AFFECTIONS OF THE SPLEEN.

According to the prescriptions given by the magicians, a fresh sheep's milt is the best application for pains in the spleen, the person who applies it uttering these words: "This I do

[88] See c. 12 of this Book.

[89] Our "cricket." The troxallis was probably a kind of locust, still known to naturalists by that name.

[90] "Protropum." Wine of the first running.

for the cure of the spleen." This done, it is enjoined that the milt should be covered up with mortar in the wall of the patient's sleeping-room, and sealed with a ring, a charm[91] being repeated thrice nine times. A dog's milt, removed from the animal while still alive, taken with the food, is a cure for diseases of the spleen: some, again, attach it fresh to that part of the patient's body. Others give the patient—without his knowing it—the milt of a puppy two days old, to eat, in squill vinegar; the milt, too, of a hedge-hog is similarly used. Ashes of burnt snails are employed, in combination with linseed, nettle-seed, and honey, the treatment being persisted in till the patient is thoroughly cured.

A green lizard has a remedial effect, suspended alive in an earthen vessel, at the entrance of the sleeping-room of the patient, who, every time he enters or leaves it, must take care to touch it with his hand: the head, too, of a horned owl, reduced to ashes and incorporated with an unguent; honey, also, in which the bees have died; and spiders, the one known as the "lycos"[92] in particular.

CHAP. 18.—REMEDIES FOR PAINS IN THE SIDE AND IN THE LOINS.

For pains in the side, the heart of a hoopoe is highly esteemed; ashes, too, of burnt snails, that have been boiled in a ptisan, snails being sometimes applied in the form of a liniment, alone. Potions employed for this purpose have a sprinkling in them of the ashes of a mad dog's skull. For the cure of lumbago, the spotted lizard[93] from beyond seas is used: the head and intestines being first removed, the body is boiled in wine, with half a denarius of black poppy, and the decoction is taken in drink. Green lizards, also, are taken with the food, the feet and head being first removed; or else three snails are crushed, shells and all, and boiled with fifteen peppercorns in wine. The feet of an eagle are wrenched off in a contrary direction to the joint, and the right foot is attached to the right side, the left foot to the left, according as the pains are situate. The millepede,[94] which we have spoken of

[91] "Carmen." Holland says "the *aforesaid* charm:" but this does not appear from the context. From the account, however, given by Marcus Empiricus, we learn that the charm, thus repeated twenty-seven times, is the same as that already given.

[92] Or "wolf." See B. xi. c. 28.

[93] See B. xxix. c. 28.

[94] Or woodlouse. See B. xxix. c. 39.

as being called the "oniscos," is a cure for these pains, taken, in doses of one denarius, in two cyathi of wine. The magicians recommend an earth-worm to be put in a wooden dish, which has been split and mended with iron wire; which done, some water must be taken up with the dish, the worm drenched with it and buried in the spot from which it was taken, and the water drunk from the dish. They assert, also, that this is a marvellously excellent cure for sciatica.

### CHAP. 19. (7.)—REMEDIES FOR DYSENTERY.

Dysentery is cured by taking the broth of a leg of mutton, boiled with linseed in water; by eating old ewe-milk cheese; or by taking mutton suet boiled in astringent wine. This last is good, too, for the iliac passion, and for inveterate coughs. Dysentery is removed also, by taking a spotted lizard from beyond seas, boiled down till the skin only is left, the head, feet, and intestines, being first removed. A couple of snails also, and an egg, are beaten up, shells and all, in both cases, and made lukewarm in a new vessel, with some salt, three cyathi of water, and two cyathi of raisin-wine or date-juice, the decoction being taken in drink. Ashes, too, of burnt snails, are very serviceable, taken in wine with a modicum of resin.

The snails without shells, which we have[95] mentioned as being mostly found in Africa, are remarkably useful for dysentery, five of them being burnt with half a denarius of gum acacia, and taken, in doses of two spoonfuls, in myrtle wine or any other kind of astringent wine, with an equal quantity of warm water. Some persons employ all kinds of African snails indiscriminately in this manner; while others, again, make use of a similar number of African snails or broad-shelled snails, as an injection, in preference: in cases, too, where the flux is considerable, they add a piece of gum acacia, about the size of a bean. For dysentery and tenesmus, the cast-off slough of a snake is boiled in a pewter vessel with oil of roses: if prepared in any other kind of vessel, it is applied with an instrument made of pewter. Chicken-broth is also used as a remedy for these affections; but the broth of an old cock, strongly salted, acts more powerfully as a purgative upon the bowels. A pullet's craw, grilled and administered with salt and oil, has

[95] In B. xxix. c. 36.

a soothing effect upon cœliac affections; but it is absolutely necessary that neither fowl nor patient should have eaten corn[96] for some time before. Pigeons' dung, also, is grilled and taken in drink. The flesh of a ring-dove, boiled in vinegar, is curative of dysentery and cœliac affections: and for the cure of the former, a thrush is recommended, roasted with myrtle-berries; a blackbird, also; or honey, boiled, in which the bees have died.

CHAP. 20.—REMEDIES FOR THE ILIAC PASSION, AND FOR OTHER MALADIES OF THE BOWELS.

One of the most dangerous of maladies is that known by the name of "ileos:"[97] it may be combatted, they say, by tearing a bat asunder, and taking the blood, or by rubbing the abdomen with it. Diarrhœa is arrested more particularly by taking snails, prepared in manner already[98] mentioned for cases of asthma; the ashes, also, of snails burnt alive, administered in astringent wine; the liver of poultry grilled; the dried craw of poultry, a part that is usually thrown away, mixed with poppy-juice—in some cases it is used fresh, grilled, and taken in wine—partridge broth; the craw of partridges beaten up by itself in red wine; a wild ringdove boiled in oxycrate; a sheep's milt, grilled and beaten up in wine; or else pigeons' dung, applied with honey. The crop of an ossifrage, dried and taken in drink, is remarkably useful for patients whose digestion is impaired—indeed, its good effects may be felt if they only hold it in the hand while eating. Hence it is that some persons wear it attached to the body as an amulet; a practice which must not be too long continued, it being apt to cause a wasting of the flesh. The blood, too, of a drake has an astringent effect.

Flatulency is dispelled by eating snails; and griping pains in the bowels, by taking a sheep's milt grilled, with wine; a wild ringdove boiled in oxycrate; the fat of an otis[99] in wine; or the ashes of an ibis, burnt without the feathers, administered in drink. Another prescription mentioned for griping pains in the bowels is of a very marvellous nature: if a duck, they say, is applied to the abdomen, the malady will pass into the bird,

[96] See B. xxix. c. 36.
[97] The iliac passion, or ileus volvulus.
[98] In c. 16 of this Book.
[99] A kind of bustard. See B. x. cc. 29, 50, and c. 45 of this Book.

and it will die.[1] Gripings of the bowels are treated also with boiled honey in which the bees have died.

Colic is most effectually cured by taking a roasted lark with the food. Some recommend, however, that it should be burnt to ashes in a new vessel, feathers and all, and then pounded and taken for four consecutive days, in doses of three spoonfuls, in water. Some say that the heart of this bird should be attached to the thigh, and, according to others, the heart should be swallowed fresh, quite warm, in fact. There is a family of consular dignity, known as the Asprenates,[2] two brothers, members of which, were cured of colic; the one by eating a lark and wearing its heart in a golden bracelet; the other, by performing a certain sacrifice in a chapel built of raw bricks, in form of a furnace, and then blocking up the edifice the moment the sacrifice was concluded. The ossifrage has a single intestine only, which has the marvellous property of digesting all that the bird has swallowed: the extremity of this intestine, it is well known, worn as an amulet, is an excellent remedy for colic.

There are certain concealed maladies incident to the intestines, in relation to which there are some marvellous statements made. If to the stomach and chest, more particularly, blind puppies are applied, and suckled with milk from the patient's mouth,[3] the virulence of the malady, it is said, will be transferred to them, and in the end they will die: on opening them, too, the causes of the malady will be sure to be discovered. In all such cases, however, the puppies must be allowed to die, and must be buried in the earth. According to what the magicians say, if the abdomen is touched with a bat's blood, the person will be proof against colic for a whole year: when a patient, too, is attacked with the pains of colic, if he can bring himself to drink the water in which he has washed his feet, he will experience a cure.

### CHAP. 21. (8.)—REMEDIES FOR URINARY CALCULI AND AFFECTIONS OF THE BLADDER.

For the cure of urinary calculi, it is a good plan to rub

[1] See c. 14 of this Book, where a similar notion is mentioned.

[2] There were three consuls of this name, L. Nonius Asprenas, A.D. 7; L. Nonius Asprenas, A.D. 29; and P. Nonius Asprenas, A.D. 38. They are mentioned also by Suetonius, Tacitus, Dion Cassius, Frontinus, and Seneca.

[3] See c. 14 of this Book.

the abdomen with mouse-dung. The flesh of a hedge-hog is agreeable eating, they say, if killed with a single blow upon the head, before it has had time to discharge its urine[3*] upon its body: [persons[4] who eat this flesh, it is said, will never by any possibility suffer from strangury.] The flesh of a hedge-hog thus killed, is a cure for urinary obstructions of the bladder; and the same, too, with fumigations made therewith. If, on the other hand, the animal has discharged its urine upon its body, those who eat the flesh will be sure to be attacked by strangury, it is said. As a lithontriptic,[5] earth-worms are recommended, taken in ordinary wine or raisin wine; or else boiled snails, prepared the same way[6] as for the cure of asthma. For the cure of urinary obstructions, snails are taken from the shells, pounded, and administered in one cyathus of wine, three the first day, two the second, and one the third. For the expulsion of calculi, the empty shells are reduced to ashes and taken in drink: the liver also of a water-snake, and the ashes of burnt scorpions are similarly employed, or are taken with bread or eaten with a locust. For the same purpose, the small grits that are found in the gizzard of poultry or in the craw of the ringdove, are beaten up and sprinkled in the patient's drink; the craw, too, of poultry is taken, dried, or if fresh, grilled.

For urinary calculi and other obstructions of the bladder, dung of ring-doves is taken, with beans; ashes also of wild ring-doves' feathers, mixed with vinegar and honey; the intestines of those birds, reduced to ashes, and administered in doses of three spoonfuls; a small clod from a swallow's nest, dissolved in warm water; the dried crop of an ossifrage; the dung of a turtle-dove, boiled in honied wine; or the broth of a boiled turtle-dove.

It is very beneficial also for urinary affections to eat thrushes with myrtle-berries, or grasshoppers grilled on a shallow-pan; or else to take the millepedes, known as "onisci,"[7] in drink. For pains in the bladder, a decoction of lambs' feet is used.

[3*] See B. viii. c. 56.

[4] This passage is omitted by Sillig as an evident interpolation from the context a couple of lines below.

[5] The belief in lithontriptics can hardly be said to exist at the present day. Ajasson refers to the grant made by the British Parliament of £5000 to Mrs. Stephens for her lithontriptic!!

[6] In c. 16 of this Book.

[7] See B. xxix. c. 39.

Chicken-broth relaxes the bowels and mollifies acridities; swallows' dung, too, with honey, employed as a suppository, acts as a purgative.

## CHAP. 22.—REMEDIES FOR DISEASES OF THE FUNDAMENT AND OF THE GENERATIVE ORGANS.

The most efficacious remedies for diseases of the rectum are wool-grease—to which some add pompholix[8] and oil of roses—a dog's head reduced to ashes; or a serpent's slough, with vinegar. In cases where there are chaps and fissures of those parts, the ashes of the white portion of dogs' dung are used, mixed with oil of roses; a prescription due, they say, to Æsculapius,[9] and remarkably efficacious also for the removal of warts. Ashes of burnt mouse-dung, swan's fat, and cow suet, are also used. Procidence of the rectum is reduced by an application of the juices discharged by snails when punctured. For the cure of excoriation of those parts, ashes of burnt wood-mice are used, with honey; the gall of a hedge-hog, with a bat's brains and bitches' milk; goose-grease, with the brains of the bird, alum, and wool-grease; or else pigeons' dung, mixed with honey. A spider, the head and legs being first removed, is remarkably good as a friction for condylomata. To prevent the acridity of the humours from fretting the flesh, goose-grease is applied, with Punic wax, white lead, and oil of roses; swan's grease also, which is said to be a cure for piles.

A very good thing, they say, for sciatica, is, to pound raw snails in Aminean[10] wine, and to take them with pepper; to eat a green lizard, the feet, head, and intestines being first removed; or to eat a spotted lizard, with the addition of three oboli of black poppy. Ruptures and convulsions are treated with sheep's gall, diluted with woman's milk. The gravy which escapes from a ram's lights roasted, is used for the cure of itching pimples and warts upon the generative organs: for other affections of those parts, the ashes of a ram's wool, unwashed even, are used, applied with water; the suet of a sheep's caul, and of the kidneys more particularly, mixed with ashes of pumice-stone and salt; greasy wool, applied with cold water; sheep's flesh, burnt to ashes, and applied with water;

[8] See B. xxxiv. c. 33.

[9] It can hardly be said to add to his fame.

[10] See B. xiv. c. 4.

a mule's hoofs, burnt to ashes; or the powder of pounded horse teeth, sprinkled upon the parts. In cases of decidence of either of the testes, an application of the slime discharged by snails is remedial, they say. For the treatment of sordid or running ulcers of those parts, the fresh ashes of a burnt dog's head are found highly useful; the small, broad kind of snail, beaten up in vinegar; a snake's slough, or the ashes of it, applied in vinegar; honey in which the bees have died, mixed with resin; or the kind of snail without a shell, that is found in Africa, as already[11] mentioned, beaten up with powdered frankincense and white of eggs, the application being renewed at the end of thirty days; some persons, however, substitute a bulb for the frankincense.

For the cure of hydrocele, a spotted lizard, they say, is marvellously good, the head, feet, and intestines being first removed, and the rest of the body roasted and taken frequently with the food. For incontinence[12] of urine dogs' fat is used, mixed with a piece of split alum the size of a bean; ashes, also, of African snails burnt with the shells, taken in drink; or else the tongues of three geese roasted and eaten with the food, a remedy which we owe to Anaxilaüs. Mutton-suet,[13] mixed with parched salt, has an aperient effect upon inflammatory tumours, and mouse-dung, mixed with powdered frankincense and sandarach, acts upon them as a dispellent: the ashes, also, of a burnt lizard, or the lizard itself, split asunder and applied; or else bruised millepedes, mixed with one third part of turpentine. Some make use of earth of Sinope[14] for this purpose, mixed with a bruised snail. Ashes of empty snail-shells burnt alone, mixed with wax, possess certain repercussive properties; the same, too, with pigeons' dung, employed by itself, or applied with oat-meal or barley-meal. Cantharides, mixed with lime, remove inflammatory tumours quite as effectually as the lancet; and small snails, applied topically with honey, have a soothing effect upon tumours in the groin.

[11] In B. xxix. c. 36 and in c. 19 of this Book.
[12] See B. xxxii. c. 35.
[13] Ajasson remarks that this may probably be useful.
[14] See B. xxxv. cc. 12, 13.

CHAP. 23. (9.)—REMEDIES FOR GOUT AND FOR DISEASES OF THE FEET.

To prevent varicose veins, the legs of children are rubbed with a lizard's blood: but both the party who operates and the patient must be fasting at the time. Wool-grease, mixed with woman's milk and white lead, has a soothing effect upon gout; the liquid dung also voided by sheep; a sheep's lights; a ram's gall, mixed with suet; mice, split asunder and applied; a weasel's blood, used as a liniment with plantago; the ashes of a weasel burnt alive, mixed with vinegar and oil of roses, and applied with a feather, or used in combination with wax and oil of roses; a dog's gall, due care being taken not to touch it with the hand, and to apply it with a feather; poultry dung; or else ashes of burnt earth-worms, applied with honey, and removed at the end of a couple of days. Some, however, prefer using this last with water, while others, again, apply the worms themselves, in the proportion of one acetabulum[15] to three cyathi of honey, the feet of the patient being first anointed with oil of roses. The broad, flat, kind of snail, taken in drink, is used for the removal of pains in the feet and joints; two of them being pounded for the purpose and taken in wine. They are employed, also, in the form of a liniment, mixed with the juice of the plant helxine:[16] some, however, are content to beat up the snails with vinegar. Some say that salt, burnt in a new earthen vessel with a viper, and taken repeatedly, is curative of gout, and that it is an excellent plan to rub the feet with viper's fat. It is asserted, too, that similar results are produced by keeping a kite till it is dry, and then powdering it and taking it in water, a pinch in three fingers at a time; by rubbing the feet with the blood of that bird mixed with nettles; or by bruising the first feathers of a ring-dove with nettles. The dung of ring-doves is used as a liniment for pains in the joints; the ashes also of a burnt weasel, or of burnt snails, mixed with amylum[17] or gum tragacanth.

A very excellent cure for contusions of the joints is a spider's web; but there are persons who give the preference to ashes of burnt cobwebs or of burnt pigeons' dung, mixed with polenta and white wine. For sprains of the joints a sovereign

[15] "Acetabuli mensurâ" seems a preferable reading to "aceto mensurâ," which makes no sense.

[16] See B. xxi. c. 56.

[17] See B. xviii. c. 17.

remedy is mutton suet, mixed with the ashes of a woman's hair; a good application, too, for chilblains is mutton suet, mixed with alum, or else ashes of a burnt dog's head or of burnt mouse-dung. Ulcers, free from discharge, are brought to cicatrize by using the above-named substances in combination with wax; ashes, also, of burnt dormice, mixed with oil; ashes of burnt wood-mice, mixed with honey; ashes of burnt earth-worms, applied with old oil; or else ashes of the snails without a shell that are so commonly found. All ulcers on the feet are cured by the application of ashes of snails, burnt alive; and for excoriations of the feet, ashes of burnt poultry-dung are used, or ashes of burnt pigeons' dung, mixed with oil. When the feet have been galled by the shoes, the ashes of an old shoe-sole are used, or the lights of a lamb or ram. For gatherings beneath[18] the nails, a horse's tooth, powdered, is a sovereign remedy. A light application of a green lizard's blood, will cure the feet of man or beast when galled beneath.

For the removal of corns upon the feet, the urine of a mule of either sex is applied, mixed with the mud which it has formed upon the ground; sheep's dung, also; the liver of a green lizard, or the blood of that animal, applied in wool; earth-worms, mixed with oil; the head of a spotted lizard, pounded with an equal quantity of vitex and mixed with oil; or pigeons' dung, boiled with vinegar. For the cure of all kinds of warts, dogs' urine is applied fresh, with the mud which it has formed upon the ground; dogs' dung, also, reduced to ashes and mixed with wax; sheep's dung; the blood of mice, applied fresh, or the body of a mouse, split asunder; the gall of a hedgehog; a lizard's head or blood, or the ashes of that animal, burnt entire; the cast-off slough of a snake; or else poultry dung, applied with oil and nitre. Cantharides, also, bruised with Taminian[19] grapes, act corrosively upon warts: but when warts have been thus removed, the remedies should be employed which we have pointed out for ulcerations on the skin.

CHAP. 24. (10.)—REMEDIES FOR EVILS WHICH ARE LIABLE TO AFFECT THE WHOLE BODY.

We will now turn our attention to those evils which are a

[18] "Subluviem." The same, probably, as the disease of the fingers which he elsewhere calls "paronychia," and perhaps identical with whitlow.

[19] See B. xxiii. c. 13.

cause of apprehension, as affecting the whole body. According to what the magicians say, the gall of a male black dog is a counter-charm for the whole of a house; and it will be quite sufficient to make fumigations with it, or to use it as a purification, to ensure its preservation against all noxious drugs and preparations. They say the same, too, with reference to a dog's blood, if the walls are sprinkled with it; and the genitals of that animal, if buried beneath the threshold. This will surprise persons the less who are aware how highly these same magicians extol that most abominable insect, the tick, and all because it is the only one that has no[20] passage for the evacuations, its eating ending only in its death, and it living all the longer for fasting: in this latter state it has been known to live so long as seven days, they say, but when it gorges to satiety it will burst in a much shorter period. According to these authorities, a tick from a dog's left ear, worn as an amulet, will allay all kinds of pains. They presage, too, from it on matters of life and death; for if the patient, they say, gives an answer to a person who has a tick about him, and, standing at the foot of the bed, asks how he is, it is an infallible sign that he will survive; while, on the other hand, if he makes no answer, he will be sure to die. They add, also, that the dog from whose left ear the tick is taken, must be entirely black. Nigidius has stated in his writings that dogs will avoid the presence all day of a person who has taken a tick from off a hog.

The magicians likewise assure us that patients suffering from delirium will recover their reason on being sprinkled with a mole's blood; and that persons who are apt to be troubled by the gods of the night[21] and by Fauni, will experience relief by rubbing themselves morning and evening with the tongue, eyes, gall, and intestines of a dragon,[22] boiled in oil, and cooled in the open air at night.

### CHAP. 25.—REMEDIES FOR COLD SHIVERINGS.

A remedy for cold shiverings, according to Nicander, is a dead amphisbæna,[23] or its skin only, attached to the body: in addition to which, he informs us that if one of these reptiles

[20] A popular fallacy of Pliny's time. See B. xi. c. 40.
[21] Spectres and nightmare.
[22] The serpent so called.
[23] See B. viii. c. 35.

is attached to a tree that is being felled, the persons hewing it will never feel cold, and will fell it all the more easily. For so it is, that this is the only one among all the serpents that faces the cold, making its appearance the first of all, and even before the cuckoo's note is heard. There is another marvellous fact also mentioned, with reference to the cuckoo: if, upon the spot where a person hears this bird for the first time, he traces round the space occupied by his right foot and then digs up the earth, it will effectually prevent fleas from breeding, wherever it is thrown.

### CHAP. 26.—REMEDIES FOR PARALYSIS.

For persons apprehensive of paralysis the fat of dormice and of field-mice, they say, is very useful, boiled: and for patients threatened with phthisis, millepedes are good, taken in drink, in manner already[24] mentioned for the cure of quinzy. The same, too, with a green lizard, boiled down to one cyathus in three sextarii of wine, and taken in doses of one spoonful daily, until the patient is perfectly cured; the ashes also of burnt snails, taken in wine.

### CHAP. 27.—REMEDIES FOR EPILEPSY.

For the cure of epilepsy wool-grease is used, with a modicum of myrrh, a piece about the size of a hazel-nut being dissolved and taken after the bath, in two cyathi of wine: a ram's testes, also, dried and pounded, and taken in doses of half a denarius, in water, or in a semi-sextarius of asses' milk; the patient being forbidden wine five days before and after using the remedy. Sheep's blood, too, is mightily praised, taken in drink; sheep's gall, also, and lambs' gall in particular, mixed with honey; the flesh of a sucking puppy, taken with wine and myrrh, the head and feet being first removed; the callosities from a mule's legs, taken in three cyathi of oxymel; the ashes of a spotted lizard from beyond seas, taken in vinegar; the thin coat of a spotted lizard, which it casts like a snake, taken in drink—indeed some persons recommend the lizard itself, gutted with a reed and dried and taken in drink; while others, again, are for roasting it on a wooden spit and taking it with the food.

It is worth while knowing how the winter slough of this

[24] In c. 12 of this Book. Woodlice are meant.

lizard is obtained when it casts it off, before it has had the opportunity of devouring[25] it; there being no creature, it is said, that resorts in its spite to more cunning devices for the deception of man; a circumstance owing to which, the name of "stellio"[26] has been borrowed as a name of reproach. The place to which it retires in summer is carefully observed, being generally some spot beneath the projecting parts of doors or windows, or else in vaults or tombs. In the early days of spring, cages made of split reeds are placed before these spots; and the narrower the interstices the more delighted is the animal with them, it being all the better enabled thereby to disengage itself of the coat which adheres to its body and impedes its freedom of action: when, however, it has once quitted it, the construction of the cage prevents its return. There is nothing whatever preferred to this lizard as a remedy for epilepsy. The brains of a weasel are also considered very good, dried and taken in drink; the liver, too, of that animal, or the testes, uterus, or paunch, dried and taken with coriander, in manner already[27] mentioned; the ashes also of a burnt weasel; or a wild weasel, eaten whole with the food. All these properties are equally attributed to the ferret. A green lizard is sometimes eaten, dressed with seasonings to stimulate the appetite, the feet and head being first removed; the ashes, too, of burnt snails are used, as an ointment, with linseed, nettle-seed, and honey.

The magicians think highly of a dragon's tail, attached to the body, with a deer's sinews, in the skin of a gazelle; as also the small grits found in the crops of young swallows, tied to the left arm of the patient; for swallows, it is said, give small stones to their young the moment they are hatched. If, at the commencement of the first paroxysm, an epileptic patient eats the first of a swallow's brood that has been hatched, he will experience a perfect cure: but at a later period the disease is treated by using swallow's blood with frankincense, or by eating the heart of the bird quite fresh. Nay, even more than this, a small stone taken from a swallow's nest will relieve the patient the moment it is applied, they say; worn, too, as an amulet, it will always act as

[25] See B. viii. c. 49.

[26] A cozener, cheat, or rogue. Ajasson has a page of discussion on the origin of this appellation.

[27] In B. xxix. c. 16.

a preservative against the malady. A kite's liver, too, eaten by the patient, is highly vaunted; the slough also of a serpent; a vulture's liver, beaten up with the blood of the bird, and taken thrice seven days in drink; or the heart of a young vulture, worn attached to the body.

And not only this, but the vulture itself is recommended as a food for the patient, and that, too, when it has been glutted with human flesh. Some recommend the breast of this bird to be taken in drink from a cup made of cerrus[28] wood, or the testes of a dunghill cock to be taken in milk and water; the patient abstaining from wine the five preceding days, and the testes being dried for the purpose. There have been authorities found to recommend one-and-twenty red flies—and those found dead, too!—taken in drink, the number being reduced where the patient is of a feeble habit.

### CHAP. 28. (11.)—REMEDIES FOR JAUNDICE.

Jaundice is combated by administering ear-wax to the patient, or else the filth that adheres to the udders of sheep, in doses of one denarius, with a modicum of myrrh, in two cyathi of wine; the ashes, also, of a dog's head, mixed with honied wine; a millepede, in one semi-sextarius of wine; earth-worms, in hydromel with myrrh; wine in which a hen's feet have been washed, after being first cleansed with water—the hen must be one with yellow[29] feet—the brains of a partridge or of an eagle, in three cyathi of wine; the ashes of a ring-dove's feathers or intestines, in honied wine, in doses of three spoonfuls; or ashes of sparrows burnt upon twigs, in doses of two spoonfuls, in hydromel.

There is a bird, known as the "icterus,"[30] from its peculiar colour: if the patient looks at it, he will be cured of jaundice, they say, and the bird will die. In my opinion this is the same bird that is known in Latin by the name of "galgulus."[31]

### CHAP. 29.—REMEDIES FOR PHRENITIS.

In cases of phrenitis a sheep's lights, attached warm round the patient's head, would appear to be advantageous. But as to giving a man suffering from delirium a mouse's brains in

[28] See B. xvi. c. 6.
[29] Like our game poultry.
[30] This word being also the Greek name for the jaundice.
[31] See B. x. c. 50. The Witwall.

water to drink, the ashes of a burnt weasel, or the dried flesh even of a hedgehog, who could possibly do it, supposing even the effects of the remedy were certain? I should be inclined, too, to rank the ashes of the eyes of a horned owl in the number of those monstrous prescriptions with which the adepts in the magic art abuse the credulity of mankind.

It is in cases, too, of fever, more particularly, that the acknowledged rules of medicine run counter to the prescriptions of these men: for they have classified the various modes of treating the disease in accordance with the twelve signs of the Zodiac, and relatively to the revolutions of the sun and moon, a system which deserves to be utterly repudiated, as I shall prove by a few instances selected from many. They recommend, for example, when the sun is passing through Gemini, that the patient should be rubbed with ashes of the burnt combs, ears, and claws of cocks, beaten up and mixed with oil. If, again, it is the moon that is passing through that sign, it is the spurs and wattles of cocks that must be similarly employed. When either of these luminaries is passing through Virgo, grains of barley must be used; and when through Sagittarius, a bat's wings. When the moon is passing through Leo, it is leaves of tamarisk that must be employed, and of the cultivated tamarisk, they add: if, again, the sign is Aquarius, the patient must use an application of box-wood charcoal, pounded.

Of the remedies, however, that we find recommended by them, I shall be careful to insert those only the efficacy of which has been admitted, or, at least, is probable in any degree; such, for instance, as the use of powerful odours, as an excitant for patients suffering from lethargy; among which, perhaps, may be reckoned the dried testes of a weasel, or the liver of that animal, burnt. They consider it a good plan, too, to attach a sheep's lights, made warm, round the head of the patient.

## CHAP. 30.—REMEDIES FOR FEVERS.

In the treatment of quartan fevers, clinical medicine is, so to say, pretty nearly powerless; for which reason we shall insert a considerable number of remedies recommended by professors of the magic art, and, first of all, those prescribed to be worn as amulets: the dust, for instance, in which a hawk has bathed

itself, tied up in a linen cloth, with a red string, and attached to the body; the longest tooth of a black dog; or the wasp known by the name of "pseudosphex,"[32] which is always to be seen flying alone, caught with the left hand and attached beneath the patient's chin. Some use for this purpose the first wasp that a person sees in the current year. Other amulets are, a viper's head, severed from the body and wrapped in a linen cloth; a viper's heart, removed from the reptile while still alive; the muzzle[33] of a mouse and the tips of its ears, wrapped in red cloth, the animal being set at liberty after they are removed; the right eye plucked from a living lizard, and enclosed with the head, separated from the body, in goat's skin; the scarabæus also that forms pellets[34] and rolls them along.

It is on account of this kind of scarabæus that the people of a great part of Egypt worship those insects as divinities; an usage for which Apion gives a curious reason, asserting, as he does, by way of justifying the rites of his nation, that the insect in its operations pictures the revolution of the sun. There is also another kind of scarabæus, which the magicians recommend to be worn as an amulet—the one that has small horns[35] thrown backwards; it must be taken up, when used for this purpose, with the left hand. A third kind also, known by the name of "fullo,"[37] and covered with white spots, they recommend to be cut asunder and attached to either arm, the other kinds being worn upon the left arm. Other amulets recommended by them, are, the heart of a snake taken from the living animal with the left hand; or four joints of a scorpion's tail, together with the sting, attached to the body in a piece of black cloth; due care being taken that the patient does not see

[32] "Bastard-wasp."

[33] "Rostellum." Holland renders it "The little prettie snout's end of a mouse."

[34] Of cowdung. It was supposed that there was no female scarabæus, and that the male insect formed these balls for the reproduction of its species. It figures very largely in the Egyptian mythology and philosophy as the emblem of the creative and generative power. It has been suggested that its Coptic name "*skalouks*" is a compound Sanscrit word, signifying —"The ox-insect that collects dirt into a round mass." See B. xi. c. 34.

[36] Probably the "lucanus" mentioned in B. xi. c. 34; supposed to be the same as the stag-beetle.

[37] The "fuller," apparently. This name may possibly be derived, however, from the Greek φυλλὸν, a "leaf."

the scorpion, which is set at liberty after the operation, or the person who has attached the amulet, for the space of three days: after the recurrence, too, of the third paroxysm, he must bury the whole in the ground. Some enclose a caterpillar in a piece of linen with a thread passed three times round it, and tie as many knots, repeating at each knot why it is that the patient performs that operation. A slug is sometimes wrapped in a piece of skin, or the heads of four slugs, cut from the body with a reed: a millepede is rolled up in wool: the small grubs that produce the gadfly,[38] are used before the wings of the insect are developed; or any other kind of hairy grub is employed that is found adhering to prickly shrubs. Some persons attach to the body four of these grubs, enclosed in an empty walnut shell, or else some of the snails that are found without a shell.

In other cases, again, it is the practice to enclose a spotted lizard in a little box, and to place it beneath the pillow of the patient, taking care to set it at liberty when the fever abates. It is recommended also, that the patient should swallow the heart of a sea-diver, removed from the bird without the aid of iron, it being first dried and then bruised and taken in warm water. The heart of a swallow is also recommended, with honey; and there are persons who say that, just before the paroxysms come on, the patient should take one drachma of swallow's dung in three cyathi of goats' milk or ewes' milk, or of raisin wine: others, again, are of opinion that the birds themselves should be taken, whole. The nations of Parthia, as a remedy for quartan fevers, take the skin of the asp, in doses of one sixth of a denarius, with an equal quantity of pepper. The philosopher Chrysippus has left a statement to the effect, that the phryganion,[39] worn as an amulet, is a remedy for quartan fevers; but what kind of animal this is he has nowhere informed us, nor have I been able to meet with any one who knows. Still, however, I felt myself bound to notice a remedy that was mentioned by an author of such high repute, in case any other person should happen to be more successful in his researches. To eat the flesh of a crow, and

[38] See B. xi. c. 38.

[39] Some suppose that this was an insect that lived among dry wood, and derive the name from the Greek φρυγανὸν. Queslon is of opinion that it is the salamander.

to use nitre in the form of a liniment, is considered highly efficacious for the treatment of chronic diseases.

In cases of tertian fever—so true it is that suffering takes delight in prolonging hope by trying every remedy—it may be worth while to make trial whether the web of the spider called "lycos"[40] is of any use, applied, with the insect itself, to the temples and forehead in a compress covered with resin and wax; or the insect itself, attached to the body in a reed, a form in which it is said to be highly beneficial for other fevers. Trial may be made also of a green lizard, enclosed alive in a vessel just large enough to receive it, and worn as an amulet; a method, it is said, by which recurrent fevers are often dispelled.

### CHAP. 31.—REMEDIES FOR DROPSY.

For the cure of dropsy, wool-grease, a piece about the size of a hazel-nut, is given in wine, with the addition of a little myrrh: some add goose-grease, steeped in myrtle wine. The filth that adheres to the udders of sheep is productive of a similar effect, as also the dried flesh of a hedge-hog, taken with the food. Matter vomited by a dog, we are assured, applied to the abdomen, will draw off the water that has accumulated there.

### CHAP. 32. (12).—REMEDIES FOR ERYSIPELAS.

For the cure of erysipelas, wool-grease is used, with pompholix[41] and oil of roses; the blood[42] also extracted from a tick; earth worms, applied in vinegar; or else a cricket crushed between the hands—the good effect of this last being that the person who uses this precaution before the malady has made its appearance, will be preserved therefrom for a whole year. Care must be taken also that iron is used for the removal of the cricket, with some of the earth about its hole. Goose-grease is also employed for this purpose; a viper's head, dried and burnt, and applied with vinegar; or a serpent's slough, applied to the body, immediately after the bath, with bitumen and lamb suet.

[40] The "wolf" spider. See c. 17 of this Book.

[41] See B. xxxiv. c. 33.

[42] Ajasson remarks that, in reality, this is not blood, but a kind of viscous liquid.

CHAP. 33.—REMEDIES FOR CARBUNCLES.

Carbuncles are removed by an application of pigeons' dung, either alone or in combination with linseed and oxymel; or of bees that have died in the honey. A sprinkling of polenta upon the sores is also used. For carbuncles and other sores of the generative organs, wool-grease is used as a remedy, with refuse of lead; and for incipient carbuncles, sheep's dung is employed. Tumours and all other affections that stand in need of emollients are treated most effectually with goose-grease; that of cranes, too, is equally efficacious.

CHAP. 34.—REMEDIES FOR BOILS.

For boils the following remedies are prescribed; a spider, applied before mentioning the insect by name, care being taken to remove it at the end of two days; a shrew-mouse, suspended by the neck till it is dead, care being taken not to let it touch the earth when dead, and to pass it three times around the boil, both operator and patient spitting on the floor each time; poultry-dung, that of a red colour in particular, applied fresh with vinegar; the crop of a stork, boiled in wine; flies, an uneven number of them, rubbed upon the patient with the ring[43] finger; the filth from sheep's ears; stale mutton suet, with ashes of women's hair; ram suet also, with ashes of burnt pumice and an equal quantity of salt.

CHAP. 35.—REMEDIES FOR BURNS.

For burns, the ashes of a dog's head are used; ashes of burnt dormice, with oil; sheep's dung, with wax; ashes also of burnt snails, an application so effectual, as not to leave a scar even. Viper's fat, too, is used, and ashes of burnt pigeons' dung, applied with oil.

CHAP. 36.—REMEDIES FOR AFFECTIONS OF THE SINEWS.

For nodosities in the sinews, the ashes of a viper's head are applied, with oil of cyprus;[44] or else earth-worms, with honey. Pains in the sinews should be treated with an application of grease; the body of a dead amphisbæna, worn as an amulet; vulture's grease, dried with the crop of the bird and beaten up with stale hog's lard; or else ashes of the head of a horned

[43] "Digitus medicus"—"The physician's finger," properly. Why the fourth finger, or that next to the little finger, was thus called, it seems impossible to say.

[44] See B. xii. c. 51.

owl, taken in honied wine with a lily root—that is, if we believe what the magicians tell us. For contractions of the sinews, the flesh of ring-doves is very good, dried and taken with the food: and for spasmodic affections, the ashes of a hedge-hog or weasel are used. A serpent's slough, attached to the patient's body in a piece of bull's hide, is a preventive of spasms: and the dried liver of a kite, taken in doses of three oboli, in three cyathi of hydromel, is a preservative against opisthotony.

CHAP. 37.—REMEDIES FOR MALADIES OF THE NAILS AND FINGERS.

Agnails and hangnails upon the fingers are removed by using the ashes of a burnt dog's head, or the uterus of a bitch boiled in oil, the fingers being first rubbed with a liniment of ewe-milk butter, mixed with honey. The gall-bladder, too, of any animal is very useful for this purpose. Malformed nails are healed with an application of cantharides and pitch, which is removed at the end of two days; or else with locusts fried with he-goat suet; or with an application of mutton suet. Some mix mistletoe and purslain with these ingredients; while others, again, use verdigrease and mistletoe, removing the application at the end of two days.

CHAP. 38. (13.)—METHODS FOR ARRESTING HÆMORRHAGE.

Bleeding at the nostrils is arrested by mutton suet taken from the caul, introduced into the nostrils; by drawing up rennet, lamb's rennet in particular, mixed with water, into the nostrils, or by using it as an injection, a remedy which succeeds even where other remedies have failed; by making up goose-grease into a bolus with an equal quantity of butter, and plugging the nostrils with it; or by using the earth that adheres to snails, or else the snails themselves, extracted from the shell. Excessive discharges from the nostrils are arrested also by applying crushed snails, or cobwebs, to the forehead. For issues of blood from the brain, the blood or brains of poultry are used, as also pigeons' dung, thickened and kept for the purpose. In cases where there is an immoderate flow of blood from a wound, an application of horse-dung, burnt with egg-shells, is marvellously good for stopping it.

CHAP. 39.—REMEDIES FOR ULCEROUS SORES AND WOUNDS.

For the cure of ulcers, wool-grease is used, with ashes of

burnt barley and verdigrease, in equal quantities; a preparation which is good, too, for carcinomata and spreading sores. It cauterizes the flesh also around the margins of ulcers, and reduces and makes level fungous excrescences formed by sores. Ashes, too, of burnt sheep's dung, mixed with nitre, are of great efficacy for the cure of carcinomata; as also those of lambs' thigh-bones, in cases more particularly where ulcers refuse to cicatrize. Very considerable, too, is the efficacy of lights, ram's lights in particular, which are of the greatest utility for reducing and making level the fleshy excrescences formed by ulcerous sores. With sheep's dung, warmed beneath an earthen pan and kneaded, the swellings attendant upon wounds are reduced, and fistulous sores and epinyctis are cleansed and made to heal.

But it is in the ashes of a burnt dog's head that the greatest efficacy is found; as it quite equals spodium[45] in its property of cauterizing all kinds of fleshy excrescences, and causing sores to heal. Mouse-dung, too, is used as a cautery, and weasels' dung, burnt to ashes. Pounded millepedes, mixed with turpentine and earth of Sinope,[46] are used for penetrating carcinomata and fleshy indurations in deep-seated sores; and the same substances are remarkably useful for the treatment of ulcers threatened with maggots.

Indeed the several varieties of worms themselves are possessed of marvellously useful properties. The worms,[47] for instance, that breed in wood are curative of all kinds of ulcers: reduced to ashes, with an equal quantity of anise, and applied with oil, they heal cancerous sores. Earthworms are so remarkably healing for wounds recently inflicted, that it is a very general belief that by the end of seven days they will unite sinews even that have been cut asunder: hence it is that it is recommended to keep them preserved in honey. Ashes of burnt earth-worms, in combination with tar or Simblian honey,[48] cauterize the indurated margins of ulcerous sores. Some persons dry earthworms in the sun, and apply them to wounds with vinegar, the application not being removed till the end of a couple of days. The earth also that adheres to snails is useful, similarly em-

[45] See B. xxxiv. c. 34.
[46] See B. xxxv. cc. 12, 13.
[47] "Cosses."
[47] Dioscorides speaks of this honey as the produce of Sicily.

ployed; snails, too, taken whole from the shell, are pounded and applied to fresh wounds, to heal them, and they arrest the progress of cancerous sores.

There is an insect called "herpes"[49] by the Greeks, which is particularly useful for the cure of all kinds of serpiginous[50] sores. Snails, beaten up, shells and all, are very good for this purpose; and it is said that, with myrrh and frankincense, they will unite the sinews even when cut asunder. The fat, too, of a dragon,[51] dried in the sun, is remarkably useful, and so are the brains of a cock or capon for recent wounds. By taking with the food salt in which vipers have been preserved, ulcers are rendered more easy of treatment, it is said, and are made to heal all the sooner. Antonius[52] the physician, after operating in vain upon ulcers, that were incurable with the knife, used to prescribe viper's flesh to be eaten by the patient, whereby a marvellously speedy cure was effected.

The locust called "troxallis,"[53] reduced to ashes and applied with honey, removes the indurated margins of ulcerous sores: ashes, also, of burnt pigeons' dung, with arsenic and honey, are very effectual in all cases where a cautery is required. The brains of a horned owl, applied with goose-grease, are marvellously efficacious for uniting wounds, it is said. For the malignant ulcer known as "cacoëthes,"[54] the ashes of a ram's thigh-bones are used, mixed with woman's milk, the sores being washed with linen cloths well rinsed. For the same purpose, the bird known as the screech-owl[55] is boiled in oil, ewe-milk butter and honey being added to the preparation, when properly dissolved. An application of bees that have died in the honey, acts emolliently upon the indurated margins of ulcerous sores; and for the cure of elephantiasis, the blood and ashes of a weasel are employed. Wounds and weals produced by blows are effaced by an application of sheep-skins fresh from the body.

### CHAP. 40.—REMEDIES FOR BROKEN BONES.

For fractures of the joints, ashes of sheep's thigh-bones are

[49] The "creeper." It has not been identified.
[50] Which are also called "herpetic" or "creeping."
[51] The serpent so called.
[52] Antonius Castor, probably. See end of B. xx.
[53] See c. 16 of this Book. [54] A chronic cancer. [55] "Ulula."

particularly useful, applied in combination with wax; and the remedy is all the more efficacious, if a sheep's jaw-bones are burnt with the other ingredients, together with a deer's antler, and some wax dissolved in oil of roses. For broken bones, a dog's brains are used, spread upon a linen cloth, with wool laid upon the surface and moistened every now and then. The fractured bone will mostly unite in the course of fourteen days; and a cure equally expeditious may be effected by using the ashes of burnt field-mice, with honey, or of burnt earth-worms; a substance which is extremely useful for the extraction of splintered bones.

### CHAP. 41.—APPLICATIONS FOR CICATRIZATIONS, AND FOR THE CURE OF MORPHEW.

Cicatrizations are restored to their original colour by applying sheep's lights, those of a ram in particular; mutton-suet, mixed with nitre; the ashes of a green lizard; a snake's slough, boiled in wine; or else pigeons' dung, mixed with honey; a preparation which, in combination with wine, is good for the removal of white morphew. For the cure, also, of morphew, cantharides are used, with two-thirds of rue-leaves; a preparation which the patient must keep applied, in the sun, till the skin itches and rises in blisters; after which it must be fomented and well rubbed with oil, and the application repeated. This must be done for several days in succession, due precautions being taken that the ulcerations do not penetrate too deep.

For the cure, too, of morphew, a liniment is recommended, made of flies and root of agrimony; the white part also of poultry dung, kept in a horn box with stale oil; a bat's blood; or else the gall of a hedge-hog applied with water. Itch-scab is cured by using the brains of a horned owl, incorporated with saltpetre; but dog's blood is the best thing to keep it in check. The small, broad, snail that is found, crushed and applied topically, is an effectual cure for itching sensations.

### CHAP. 42.—METHODS OF EXTRACTING FOREIGN SUBSTANCES FROM THE BODY.

Arrows, pointed weapons, and other foreign substances that require to be extracted from the body, are removed by the

application of a mouse split asunder, or of a lizard more particularly, similarly divided, or else the head only of the animal, pounded with salt. The snails, too, that are found in clusters upon leaves, are pounded and applied with their shells on; as also those that are used as food, the shells being first removed, applied with hare's rennet in particular. The bones of a snake, applied with the rennet of any four-footed animal, will produce a similar effect before the end of two days: cantharides, also, bruised and applied with barley-meal, are highly extolled.

### CHAP. 43. (14.)—REMEDIES FOR FEMALE COMPLAINTS.

For diseases incident to females, a ewe's placenta is very useful, as already[56] mentioned by us, when speaking of goats: sheep's dung, too, is equally good. A fumigation of burnt locusts, applied to the lower parts, affords relief to strangury, in females more particularly. If, immediately after conception, a woman eats a cock's testes every now and then, the child of which she is pregnant will become[57] a male, it is said. The ashes of a burnt porcupine, taken in drink, are a preventive of abortion: bitches' milk facilitates delivery: and the after-birth of a bitch, provided it has not touched the ground, will act as an expellent of the fœtus. Milk, taken as a drink, strengthens the loins of women when in travail. Mouse-dung, diluted with rain water, reduces the breasts of females, when swollen after delivery. The ashes of a burnt hedge-hog, applied with oil, act as a preventive of abortion. Delivery is facilitated, in cases where the patient has taken, either goose-dung in two cyathi of water, or the liquid that escapes from the uterus of a weasel by its genitals.

Earth-worms, applied topically, effectually prevent pains in the sinews of the neck and shoulders; taken in raisin wine, they expel the after-birth, when retarded. Applied by themselves, earthworms ripen abscesses of the breasts, open them, draw the humours, and make them cicatrize: taken in honied wine, they promote the secretion of the milk. In hay-grass there are small worms found, which, attached to the neck, act as a preventive of premature delivery; they are removed, however, at the moment of childbirth, as otherwise they would have the effect of impeding delivery; care must be taken, also, not to put

[56] In B. xxviii. c. 77.

[57] "Fieri."

them on the ground. To promote conception, five or seven of them are administered in drink. Snails, taken with the food, accelerate delivery; and, applied with saffron, they promote conception. Used in the form of a liniment, with amylum[58] and gum tragacanth, they arrest uterine discharges. Taken with the food, they promote menstruation; and, mixed with deer's marrow, in the proportion of one denarius and the same quantity of cyprus[59] to each snail, they reduce the uterus when displaced. Taken from the shell, and beaten up with oil of roses, they dispel inflations of the uterus; the snails of Astypalæa being those that are mostly chosen for these purposes.

Those of Africa, again, are employed in a different manner, two of them being beaten up with a pinch of fenugreek in three fingers, and four spoonfuls of honey, and the preparation applied to the abdomen, after it has been rubbed with juice of iris.[60] There is a kind of small, white, elongated snail,[61] that is found straying here and there: dried upon tiles in the sun, and reduced to powder, these snails are mixed with bean-meal, in equal proportions, forming a cosmetic which whitens and softens the skin. The small, broad, kind of snail, mixed with polenta, is good for the removal of a tendency to scratch and rub the skin.

If a pregnant woman steps over a viper, she will be sure to miscarry;[62] the same, too, in the case of the amphisbæna, but only when it is dead. If, however, a woman carries about her a live amphisbæna in a box, she may step over one with impunity, even though it be dead. An amphisbæna, preserved for the purpose, will ensure an easy delivery, even though it be dead.[63] It is a truly marvellous fact, but if a pregnant woman steps over one of these serpents that has not been preserved, it will be perfectly harmless, provided she immediately steps over another that has been preserved. A fumigation made with a dried snake, acts powerfully as an emmenagogue.

## CHAP. 44.—METHODS OF FACILITATING DELIVERY.

The cast-off slough of a snake, attached to the loins, facili-

[58] See B. xviii. c. 17. [59] See B. xii. c. 51. [60] See B. xxi. cc. 19, 83.
[61] Varro calls them "albulæ," and says that they were found at Reate.
[62] Of course she will be liable to do so, from fright.
[63] The whole of this account appears to be in a very confused state, and is probably corrupt. Sillig's punctuation has not been adopted.

tates delivery; care must be taken, however, to remove it immediately after. It is administered, too, in wine, mixed with frankincense: taken in any other form, it is productive of abortion. A staff, by the aid of which a person has parted[64] a frog from a snake, will accelerate parturition. Ashes of the troxallis,[65] applied with honey, act as an emmenagogue; the same, too, with the spider that descends as it spins its thread from aloft; it must be taken, however, in the hollow of the hand, crushed, and applied accordingly: if, on the contrary, the spider is taken while ascending, it will arrest menstruation.

The stone aëtites,[66] that is found in the eagle's nest, preserves the fœtus against all insidious attempts at producing abortion. A vulture's feather, placed beneath the feet of the woman, accelerates parturition. It is a well-known fact, that pregnant women must be on their guard against ravens' eggs, for if a female in that state should happen to step over one, she will be sure to miscarry by the mouth.[67] A hawk's dung, taken in honied wine, would appear to render females fruitful. Goose-grease, or that of the swan, acts emolliently upon indurations and abscesses of the uterus.

CHAP. 45.—METHODS OF PRESERVING THE BREASTS FROM INJURY.

Goose-grease, mixed up with oil of roses and a spider, protects the breasts after delivery. The people of Phrygia and Lycaonia have made the discovery, that the grease of the otis[68] is good for affections of the breasts, resulting from recent delivery: for females affected with suffocations of the uterus, they employ a liniment made of beetles. The shells of partridges' eggs, burnt to ashes and mixed with cadmia[69] and wax, preserve the firmness[70] of the breasts. It is generally thought, that if the egg of a partridge or * * * is passed three times round a woman's breasts, they will never become flaccid; and that, if these eggs are swallowed, they will be productive of fruitfulness, and promote the plentiful secretion

[64] Ajasson has wasted ten lines of indignation upon the question where such a staff is to be found!

[65] See c. 16 of this Book.

[66] See B. xxxvi. c. 39.

[67] An impossibility. See B. x. c. 15, for the stories about the raven on which this notion was based.

[68] See B. x. cc. 29, 50.

[69] See B. xxxiv. cc. 22, 23.

[70] See B. xxviii. c. 77.

of the milk. It is believed, too, that by anointing a woman's breasts with goose-grease, pains therein may be allayed; that moles formed in the uterus may be dispersed thereby; and that itch [71] of the uterus may be dispelled by the application of a liniment made of crushed bugs.

### CHAP. 46.—VARIOUS KINDS OF DEPILATORIES.

Bats' blood has all the virtues of a depilatory: but if applied to the cheeks of youths, it will not be found sufficiently efficacious, unless it is immediately followed up by an application of verdigrease or hemlock-seed; this method having the effect of entirely removing the hair, or at least reducing it to the state of a fine down. It is generally thought, too, that bats' brains are productive of a similar effect; there being two kinds of these brains, the red and the white. Some persons mix with the brains the blood and liver of the same animal: others, again, boil down a viper in three semisextarii of oil, and, after boning it, use it as a depilatory, first pulling out the hairs that are wanted not to grow. The gall of a hedgehog is a depilatory, more particularly if mixed with bats' brains and goats' milk: the ashes, too, of a burnt hedgehog are used for a similar purpose. If, after plucking out the hairs that are wanted not to grow, or if, before they make their appearance, the parts are well rubbed with the milk of a bitch with her first litter, no hairs will grow there. The same result is ensured, it is said, by using the blood of a tick taken from off a dog, or else the blood or gall of a swallow.

(15.) Ants' eggs, they say, beaten up with flies, impart a black colour [72] to the eyebrows. If it is considered desirable that the colour of the infant's eyes should be black, the pregnant woman must eat a rat.[73] Ashes of burnt earth-worms, applied with oil, prevent the hair from turning white.

### CHAP. 47.—REMEDIES FOR THE DISEASES OF INFANTS.

For infants that are troubled with coagulation of the milk, a grand preservative is lamb's rennet, taken in water; and in cases where the milk has so coagulated, it may be remedied by administering rennet in vinegar. For the pains incident

[71] "Scabiem vulvarum."

[72] Ajasson queries whether "denigrare" may not mean here "to render pale."

[73] "Sorex."

to dentition, sheep's brains are a very useful remedy. The inflammation called "siriasis,"[73*] to which infants are liable, is cured by attaching to them the bones that are found in the dung of dogs. Hernia in infants is cured by letting a green lizard bite the child's body while asleep, after which the lizard is attached to a reed, and hung up in the smoke; by the time the animal dies, the child will be perfectly cured, it is said. The slime of snails, applied to the eyes of children, straightens the eyelashes, and makes them grow. Ashes of burnt snails, applied with frankincense and juice of white grapes, are a cure for hernia [in infants], if applied for thirty days consecutively. Within the horns[74] of snails, there are certain hard substances found, like grits of sand: attached to infants, they facilitate dentition.

Ashes of empty snail-shells, mixed with wax, are a preventive of procidence of the rectum; but they must be used in combination with the matter that exudes from a viper's brains, on the head being pricked. Vipers' brains, attached to the infant's body in a piece of skin, facilitate dentition, a similar effect being produced by using the larger teeth of serpents. Ravens' dung, attached to an infant with wool, is curative of cough.

It is hardly possible to preserve one's seriousness in describing some of these remedies, but as they have been transmitted to us, I must not pass them in silence. For the treatment of hernia in infants, a lizard is recommended; but it must be a male lizard, a thing that may be ascertained by its having but one orifice beneath the tail. The method of proceeding, is for the lizard to bite the part affected through cloth of gold, cloth of silver, and cloth dyed purple; after which it is tied fast in a cup that has never been used, and smoked. Incontinence of urine in infants is checked by giving them boiled mice[75] with their food. The large indented horns of the scarabæus, attached to the bodies of infants, have all the virtues of an amulet. In the head of the boa[76] there is a small stone, they say, which the serpent spits out, when it is in fear of death: if the reptile is taken by surprise, and the head cut off, and this stone ex-

[73*] Supposed to be an inflammation of the membranes of the brain.
[74] See c. 8 of this Book.
[75] A remedy stilll used, Ajasson says, in the French provinces.
[76] See B. viii. c. 14, and B. xxix. c. 38.

tracted, it will aid dentition to a marvellous degree, attached to the neck of infants. The brains, too, of the same serpent are recommended to be attached to the body for a similar purpose, as also the small stone or bone that is found in the back of the slug.

An admirable promoter of dentition is found in sheep's brains, applied to the gums; and equally good for diseases of the ears, is an application of goose-grease, with juice of ocimum. Upon prickly plants there is found a kind of rough, hairy, grub: attached to the neck of infants, these insects give instant relief, it is said, when any of the food has stuck in the throat.

### CHAP. 48.—PROVOCATIVES OF SLEEP.

As a soporific, wool-grease is employed, diluted in two cyathi of wine with a modicum of myrrh, or else mixed with goose-grease and myrtle wine. For a similar purpose also, a cuckoo is attached to the body in a hare's skin, or a young heron's bill to the forehead in an ass's skin: it is thought, too, that the beak alone, steeped in wine, is equally efficacious. On the other hand, a bat's head, dried and worn as an amulet, acts as a preventive of sleep.

### CHAP. 49.—APHRODISIACS AND ANTAPHRODISIACS.

A lizard drowned in a man's urine has the effect of an antaphrodisiac upon the person whose urine it is; for this animal is to be reckoned among the philtres, the magicians say. The same property is attributed to the excrements of snails, and to pigeons' dung, taken with oil and wine. The right lobe of a vulture's lungs, attached to the body in the skin of a crane, acts powerfully as a stimulant upon males: an effect equally produced by taking the yolks of five pigeons' eggs, in honey, mixed with one denarius of hog's lard; sparrows, or eggs of sparrows, with the food; or by wearing the right testicle of a cock, attached to the body in a ram's skin. The ashes of a burnt ibis, it is said, employed as a friction with goose-grease and oil of iris, will prevent abortion when a female has once conceived; while the testes of a game-cock, on the other hand, rubbed with goose-grease and attached to the body in a ram's skin, have all the effect of an antaphrodisiac: the same, too, with the testes of any kind of dunghill cock, placed, together with the blood of a cock, beneath the bed. Hairs taken from

the tail of a she-mule while being covered by the stallion, will make a woman conceive, against her will even, if knotted together at the moment of the sexual congress.[77] If a man makes water upon a dog's urine, he will become disinclined to copulation, they say.

A singular thing, too, is what is told about the ashes of a spotted lizard—if indeed it is true—to the effect that, wrapped in linen and held in the left hand, they act as an aphrodisiac, while, on the contrary, if they are transferred to the right, they will take effect as an antaphrodisiac. A bat's blood, too, they say, received on a flock of wool and placed beneath a woman's head, will promote sexual desire; the same being the case also with a goose's tongue, taken with the food or drink.

### CHAP. 50.—REMEDIES FOR PHTHIRIASIS, AND FOR VARIOUS OTHER AFFECTIONS.

In phthiriasis, all the vermin upon the body may be killed in the course of three days, by taking the cast-off slough of a serpent, in drink, or else whey of milk after the cheese is removed, with a little salt. Cheese, it is said, will never become rotten with age or be touched by mice, if a weasel's brains have been mixed with the rennet. It is asserted, too, that if the ashes of a burnt weasel are mixed with the cramming for chickens or young pigeons, they will be safe from the attacks of weasels. Beasts of burden, when troubled with pains in staling, find immediate relief, if a bat is attached to the body; and they are effectually cured of bots by passing a ring-dove three times round their generative parts—a truly marvellous thing to relate, the ring-dove, on being set at liberty, dies, and the beast is instantly relieved from pain.

### CHAP. 51.—REMEDIES FOR INTOXICATION.

The eggs of an owlet, administered to drunkards three days in wine, are productive of a distaste for that liquor. A sheep's lights roasted, eaten before drinking,[78] act as a preventive of inebriety. The ashes of a swallow's beak, bruised with myrrh and sprinkled in the wine, act as a preservative against intoxication: Horus,[79] king of Assyria, was the first to discover this.[80]

[77] "Inter se conligatæ in coitu."
[78] See B. xxviii. c. 80.
[79] See end of B. xxix.
[80] He has hardly immortalized his name by it.

CHAP. 52.—PECULIARITIES RELATIVE TO CERTAIN ANIMALS.

In addition to these, there are some other peculiar properties attributed to certain animals, which require to be mentioned in the present Book. Some authors state that there is a bird in Sardinia, resembling the crane and called the "gromphena;"[81] but it is no longer known even by the people of that country, in my opinion. In the same province, too, there is the ophion, an animal which resembles the deer in the hair only, and to be found[82] nowhere else. The same authors have spoken also of the "subjugus,"[83] but have omitted to state what animal it is, or where it is to be found. That it did formerly exist, however, I have no doubt, as certain remedies are described as being derived from it. M. Cicero speaks of animals called "biuri,"[84] which gnaw the vines in Campania.

CHAP. 53. (16.)—OTHER MARVELLOUS FACTS CONNECTED WITH ANIMALS.

There are still some other marvellous facts related, with reference to the animals which we have mentioned. A dog will not bark at a person who has any part of the secundines of a bitch about him, or a hare's dung or fur. The kind of gnats called "muliones,"[85] do not live more than a single day. Persons when taking honey from the hives, will never be touched by the bees if they carry the beak of a wood-pecker[86] about them. Swine will be sure to follow the person who has given them a raven's brains, made up into a bolus. The dust in which a she-mule has wallowed, sprinkled upon the body, will allay the flames of desire. Rats may be put to flight by castrating a male rat, and setting it at liberty. If a snake's slough is beaten up with some spelt, salt, and wild thyme, and introduced into the throat of oxen, with wine, at the time that grapes are ripening, they will be in perfect health for a whole year to come: the same, too, if three young swallows are given to them, made up into three boluses. The dust gathered from the track of a snake, sprinkled among bees, will make

[81] Possibly a kind of crane.

[82] See B. viii. c. 75, and B. xxviii. c. 42.

[83] It has not been identified.

[84] Hardouin thinks that the worm called ἴξ by the Greeks is meant. Ovid speaks in his Fasti, B. i. ll. 354—360, of the goat, as being very fond of gnawing the vine.

[85] See B. xi. c. 19.

[86] See B. x. c. 20.

them return to the hive. If the right testicle of a ram[87] is tied up, he will generate females only. Persons who have about them the sinews taken from the wings or legs of a crane, will never be fatigued with any kind of laborious exertion. Mules will never kick when they have drunk wine.

Of all known substances, it is a mule's[88] hoofs only that are not corroded by the poisonous waters of the fountain Styx: a memorable discovery made by Aristotle,[89] to his great infamy, on the occasion when Antipater sent some of this water to Alexander the Great, for the purpose of poisoning him.

We will now pass on to the aquatic productions.

SUMMARY.—Remedies, narratives, and observations, eight hundred and fifty-four.

ROMAN AUTHORS QUOTED.—M. Varro,[90] Nigidius,[91] M. Cicero,[92] Sextius Niger[93] who wrote in Greek, Licinius Macer.[94]

FOREIGN AUTHORS QUOTED.—Eudoxus,[95] Aristotle,[96] Hermippus,[97] Homer, Apion,[98] Orpheus,[99] Democritus,[1] Anaxilaüs.[2]

MEDICAL AUTHORS QUOTED.—Botrys,[3] Horus,[4] Apollodorus,[5] Menander,[6] Archidemus,[7] Aristogenes,[8] Xenocrates,[9] Diodorus,[10] Chrysippus,[11] Nicander,[12] Apollonius[13] of Pitanæ.

[87] See B. viii. c. 72.

[88] Some authorities say the ass, and others the Onager, or wild ass.

[89] This story is generally regarded as an absurdity, and is rejected by Arrian and Plutarch.

[90] See end of B. ii.

[91] See end of B. vi.

[92] See end of B. vii.

[93] See end of B. xii.

[94] See end of B. xix.

[95] See end of B. ii.

[96] See end of B. ii.

[97] An eminent philosopher, a native of Smyrna, and disciple of Callimachus. He flourished about the middle of the third century B.C., and left numerous works, the principal of which was a Biography of the Philosophers, Poets, and Historians, which seems to have been highly esteemed. It is thought, too, that he wrote a work on Magic and Astrology; but there are some doubts about the writer's identity.

[98] A native of Oasis in Egypt, who taught rhetoric at Rome in the reigns of Tiberius and Claudius. Some curious particulars are given respecting him in c. 6 of the present Book. His ostentation, vanity, and insolent pretensions fully merited the title "Cymbalum mundi," which Tiberius bestowed on him. He was a man, however, of considerable learning and great eloquence, and was distinguished for his hatred to the Jews. Of his numerous works only some fragments remain.

[99] See end of B. xx.

[1] See end of B. ii.

[2] See end of B. xxi.

[3] See end of B. xiii.

[4] See end of B. xxix.

[5] See end of B. xi.

[6] See end of B. xix.

[7] See end of B. xii.

[8] See end of B. xxix.

[9] See end of B. xx.

[10] See end of B. xxix.

[11] See end of B. xx.

[12] See end of B. viii.

[13] See end of B. xxix.

# BOOK XXXI.

## REMEDIES DERIVED FROM THE AQUATIC PRODUCTIONS.

### CHAP. 1. (1.)—REMARKABLE FACTS CONNECTED WITH WATER.

We have now to speak of the benefits derived, in a medicinal point of view, from the aquatic productions; for not here even has all-bounteous Nature reposed from her work. Amid waves and billows, and tides of rivers for ever on the ebb and flow, she still unceasingly exerts her powers; and nowhere, if we must confess the truth, does she display herself in greater might, for it is this among the elements that holds sway over all the rest. It is water that swallows up dry land, that extinguishes flame, that ascends aloft, and challenges possession of the very heavens: it is water that, spreading clouds as it does, far and wide, intercepts the vital air we breathe; and, through their collision, gives rise to thunders and lightnings,[1] as the elements of the universe meet in conflict.

What can there be more marvellous than waters suspended aloft in the heavens? And yet, as though it were not enough to reach so high an elevation as this, they sweep along with them whole shoals of fishes, and often stones as well, thus lading themselves with ponderous masses which belong to other elements, and bearing them on high. Falling upon the earth, these waters become the prime cause of all that is there produced; a truly wondrous provision of Nature, if we only consider, that in order to give birth to grain and life to trees and to shrubs, water must first leave the earth for the heavens, and thence bring down to vegetation the breath of life! The admission must be surely extorted from us, that for all our resources the earth is indebted to the bounteousness of water.

[1] See B. ii. c. 43. Ajasson remarks, that the electric fluid, forming lightning, escapes from the clouds through causes *totally* independent of water. Still, Pliny would appear to be right in one sense; for if there were no water, there would be no clouds; and without clouds the electric fluid would probably take some other form than that of lightning.

It will be only proper, therefore, in the first place to set forth some instances of the powerful properties displayed by this element; for as to the whole of them, what living mortal could describe them?

CHAP. 2. (2.)—THE DIFFERENT PROPERTIES OF WATERS.

On all sides, and in a thousand countries, there are waters bounteously springing forth from the earth, some of them cold, some hot, and some possessed of these properties united: those in the territory of the Tarbelli,[2] for instance, a people of Aquitania, and those among the Pyrenæan[3] Mountains, where hot and cold springs are separated by only the very smallest distance. Then, again, there are others that are tepid only, or lukewarm, announcing thereby the resources they afford for the treatment of diseases, and bursting forth, for the benefit of man alone, out of so many animated beings.[4]

Under various names, too, they augment the number of the divinities,[5] and give birth to cities; Puteoli,[6] for example, in Campania, Statyellæ[7] in Liguria, and Sextiæ[8] in the province of Gallia Narbonensis. But nowhere do they abound in greater number, or offer a greater variety of medicinal properties than in the Gulf of Baiæ;[9] some being impregnated with sulphur, some with alum, some with salt, some with nitre,[10] and some with bitumen, while others are of a mixed quality, partly acid and partly salt. In other cases, again, it is by their vapours that waters are so beneficial to man, being so intensely hot as to heat our baths even, and to make cold water boil in our sitting-baths; such, for instance, as the springs at Baiæ, now known as "Posidian," after the name of a freedman[11] of the Emperor Claudius; waters which are so hot as to cook articles

[2] He alludes to the mineral waters of Acqs or Dax on the Adour, in the French department of the Ariège. They are still highly esteemed.

[3] The principal of which are those of Aigues-Chaudes, Aigues-Bonnes, Bagnères-Adores, Cambo, Bagnères, Barèges, Saint-Sauveur, and Cauteret.

[4] Ajasson remarks that animals in all cases refuse to drink mineral waters.

[5] He alludes to Neptune, Amphitrite, the Oceanides, Nereides, Tritons, Crenides, Limnades, Potamides, and numerous other minor divinities.

[6] See B. iii. c. 9. [7] See B. iii. c. 7. [8] See B. iii. c. 5.

[9] The mineral waters of Baiæ are still held in high esteem.

[10] As to the identity of the "nitrum" of Pliny, see c. 46 of this Book.

[11] Posides, a eunuch who belonged to the Emperor Claudius, according to Suetonius, c. 28.

of food even. There are others, too,—those, for example, formerly the property of Licinius Crassus—which send forth their vapours in the sea[12] even, thus providing resources for the health of man in the very midst of the waves!

### CHAP. 3.—REMEDIES DERIVED FROM WATER.

According to their respective kinds, these waters are beneficial for diseases of the sinews, feet, or hips, for sprains or for fractures; they act, also, as purgatives upon the bowels, heal wounds,[13] and are singularly useful for affections of the head and ears: indeed, the waters of Cicero are good for the eyes.[14] The country-seat where these last are found is worthy of some further mention: travelling from Lake Avernus towards Puteoli, it is to be seen on the sea-shore, renowned for its fine portico and its grove. Cicero gave it the name of Academia,[15] after the place so called at Athens: it was here that he composed those treatises[16] of his that were called after it; it was here, too, that he raised those monuments[17] to himself; as though, indeed, he had not already done so throughout the length and breadth of the known world.

Shortly after the death of Cicero, and when it had come into the possession of Antistius Vetus,[18] certain hot springs burst forth at the very portals[19] of this house, which were found to be remarkably beneficial for diseases of the eyes, and have been celebrated in verse by Laurea Tullius,[20] one of the freedmen of Cicero; a fact which proves to demonstration that his servants even had received inspiration from that majestic and all-powerful genius of his. I will give the lines, as they deserve to be read, not there only, but everywhere:

[12] There are still submarine volcanoes in the vicinity of Sicily, but the spot here referred to is now unknown.

[13] The Eaux Bonnes in the Basses Pyrénées are good for wounds. After the battle of Pavia they received from the soldiers of Jean d'Albret, king of Navarre, the name of *Eaux d'arquebusade*.

[14] Only, Ajasson remarks, where the ophthalmia is caused by inflammation of the conjunctive.

[15] He also called it his Puteolan villa.

[16] The "Quæstiones Academicæ."

[17] "Monumenta." Ajasson queries what monuments they were, thus raised by the "*parvenu* of Arpinum." He suggests that the erection may have been a chapel, temple-library, or possibly funeral monument.

[18] C. Antistius Vetus probably, a supporter of Julius Cæsar, Consul Suffectus, B.C. 30.

[19] "In parte primâ."

[20] There are three Epigrams, probably by this author, in the Greek Anthology.

Great prince of Roman eloquence, thy grove,
Where erst thou bad'st it rise, is verdant now:
Thy villa, from fair Academia[21] nam'd,
From Vetus now its finish'd graces takes.
Here, too, fair streams burst forth, unknown before,
Which with their spray the languid eyes relieve.
The land, I ween, these bounteous springs reveal'd,
To honour Cicero, its ancient lord.
Throughout the world his works by eyes are scann'd;
May eyes unnumber'd by these streams be heal'd.

### CHAP. 4.—WATERS PRODUCTIVE OF FECUNDITY. WATERS CURATIVE OF INSANITY.

In Campania, too, are the waters of Sinuessa,[22] remedial, it is said, for sterility in females, and curative of insanity in men.

### CHAP. 5.—WATERS REMEDIAL FOR URINARY CALCULI.

The waters of the island of Ænaria are curative of urinary calculi,[23] it is said; and the same is the case with the cold spring of Acidula,[24] four miles distant from Teanum[25] Sidicinum, the waters at Stabiæ, known as the Dimidiæ,[26] and those in the territory of Venafrum,[27] which take their rise in the spring of Acidula. Patients suffering from these complaints may be cured also by drinking the waters of Lake Velia;[28] the same effects being produced by those of a spring in Syria, near Mount Taurus, M. Varro says, and by those of the river Gallus in Phrygia, as we learn from Callimachus. In taking the waters, however, of this last, the greatest moderation is necessary, as they are apt to cause delirium; an effect equally produced, Ctesias tells us, by the waters of the Red Fountain[29] in Æthiopia.

[21] We are sensible that, in thus shortening the penultimate, we shall incur the censure of solecizing, which Hardouin has cast upon the poet Claudian for doing the same.

[22] At the Torre de' Bagni, Hardouin says, near the church of Santa Maria a Caudara.

[23] Saline and gaseous waters are good for this purpose. See B. iii. c. 12.

[24] It has still the same reputation, Hardouin says, and is situate near the castle of Francolici.

[25] See B. iii. c. 9.

[26] Or "half-strength" waters, apparently. See B. iii. c. 9.

[27] See B. iii. c. 9.

[28] See B. ii. cc. 62, 106, and B. iii. c. 17.

[29] Alluded to, probably, by Ovid, Met. xv. 319, *et seq.*

CHAP. 6.—WATERS CURATIVE OF WOUNDS.

The tepid waters of Albula,[30] near Rome, have a healing effect upon wounds. Those of Cutilia,[31] again, in the Sabine territory, are intensely cold, and by a kind of suction penetrate the body to such a degree as to have the effect of a mordent almost. They are remarkably beneficial for affections of the stomach, sinews, and all parts of the body, in fact.

CHAP. 7.—WATERS PREVENTIVE OF ABORTION.

The waters of Thespiæ[32] ensure conception to females; the same, too, with those of the river Elatus[33] in Arcadia. The spring Linus,[34] also in Arcadia, acts as a preservative of the fœtus, and effectually prevents abortion. The waters of the river Aphrodisius, on the other hand, in the territory of Pyrrhæa,[35] are productive of sterility.

CHAP. 8.—WATERS WHICH REMOVE MORPHEW.

The waters of Lake Alphius remove white morphew,[36] Varro tells us; who also mentions the fact that one Titius,[37] a personage who had held the prætorship, had a face to all appearance like that of a marble statue, in consequence of this disease. The waters of the river Cydnus,[38] in Cilicia, are curative of gout, as would appear from a letter addressed by Cassius[39] of Parma to Marcus Antonius. At Trœzen, on the contrary, all the inhabitants are subject to diseases of the feet, owing to the bad quality of the water there. The state of the Tungri,[40] in

[30] The present Bagni di Tivoli. They have other sanitary properties as well, a fact known to Strabo. Martial and Vitruvius also mention them.

[31] See B. iii. c. 17. Called Cotiscoliæ by Strabo. They were of a salt and aluminous nature.

[32] See B. iv. c. 2.

[33] Pausanias calls it the "Elaphus."

[34] Isidorus, in his "Origines," calls it the "Lechnus."

[35] In Thessaly, probably, according to Stephanus Byzantinus.

[36] Ἄλφος; from which the lake probably derived its name. It has been suggested that the source of the river Anigrus in Elis is meant. Its waters had an offensive smell, and its fish were not eatable; and near it were caverns sacred to the Nymphs Anigrides, where persons with cutaneous diseases were cured. The water of these caverns is impregnated with sulphur.

[37] Possibly the M. Titius who was proscribed by the Triumvirs, B.C. 43, and escaped to Sex. Pompeius in Sicily.

[38] See B. v. c. 22.

[39] "Cassius Parmensis." See the end of this Book.

[40] According to some authorities, he alludes to the still famous waters of

Gaul, has a spring of great renown, which sparkles as it bursts forth with bubbles innumerable, and has a certain ferruginous taste, only to be perceived after it has been drunk. This water is strongly purgative, is curative of tertian fevers, and disperses urinary calculi: upon the application of fire it assumes a turbid appearance, and finally turns red. The springs[41] of Leucogæa, between Puteoli and Neapolis, are curative of eye diseases and of wounds. Cicero, in his work entitled "Admiranda,"[42] has remarked that it is only by the waters of the marshes of Reate[43] that the hoofs of beasts of burden are hardened.

### CHAP. 9.—WATERS WHICH COLOUR THE HAIR.

Eudicus informs us that in Hestiæotis[44] there are two springs; one of which, Cerona, renders sheep black that drink of it, while the other, called Neleus, turns them white: if, again, a sheep should happen to drink their waters mixed, its fleece will be mottled. According to Theophrastus, the water of the Crathis,[45] a river of Thurii, makes sheep and cattle white, while that of the river Sybaris turns them black.

### CHAP. 10.—WATERS WHICH COLOUR THE HUMAN BODY.

And not only this, but human beings even, Theophrastus tells us, are sensible of this difference: for persons who drink the water of the Sybaris, he says, become more swarthy and more hardy, the hair inclining to curl: while those, again, who drink of the Crathis become fair and more soft-skinned, with the hair growing straight and long. So, too, in Macedonia, persons who wish the produce to be white, drive their cattle to the river Haliacmon, while those who desire a black or tawny colour, take them to water at the Axius. Upon the

Spa; but it is more probable that he alludes to the spring still in existence at the adjacent town of Tongres, which was evidently well known to the Romans, and is still called the "Fountain of Pliny."

[41] The springs on the present Monte Posilippo.

[42] This work is lost. Chifflet suggests that "Varro" should be read. See, however, B. vii. c. 2, B. xxix. c. 16 and c. 28 of this Book. It was a common-place book, probably, of curious facts.

[43] See B. ii. c. 106, where a growing rock in the marsh of Reate is mentioned.

[44] In Thessaly. A mere fable, no doubt.

[45] Ovid, Met. xv. 315, *et seq.*, tells very nearly the same fabulous story about the rivers Crathis and Sybaris.

same authority, too, we learn that in certain localities, as in the country of the Messapii, for instance, all the productions, the cereals even, grow of a tawny colour; and that at Lusi,[46] in Arcadia, there is a certain fountain in which land-mice live and dwell. The river Aleos, which passes through Erythræ, promotes the growth of hair upon the body.

### CHAP. 11.—WATERS WHICH AID THE MEMORY, OR ARE PRODUCTIVE OF FORGETFULNESS.

At the Temple[47] of the god Trophonius, in Bœotia, near the river Hercynnus, there are two fountains,[48] one of which aids the memory, while the other is productive of forgetfulness: hence the names which they respectively bear.

### CHAP. 12.—WATERS WHICH SHARPEN OR DULL THE SENSES. WATERS WHICH IMPROVE THE VOICE.

Near the town of Cescum, in Cilicia, runs the river Nus,[49] the waters of which, according to Varro, sharpen the intellect; while those of a certain spring in the island of Cea dull the senses. At Zama, in Africa, there is a spring, the waters of which render the voice more musical.[50]

### CHAP. 13.—WATERS WHICH CAUSE A DISTASTE FOR WINE. WATERS WHICH PRODUCE INEBRIETY.

Eudoxus says that persons who drink the water[51] of Lake Clitorius take a distaste for wine, and Theopompus asserts that the waters of the springs already[52] named are productive of inebriety. According to Mucianus,[53] there is a fountain at

[46] This marvellous story appears to have been derived from the works of Aristotle.

[47] Near the town of Lebadea, now Livadhia.

[48] One called "Mnemosyne," or Memory, and the other "Lethe," or Forgetfulness.

[49] From the Greek νοῦς, "spirit," "mind," or "intelligence." Ajasson thinks it possible that its water may have assuaged vertigo, or accelerated the circulation of the blood, and that thence its reputation.

[50] A fable invented by the priests, Ajasson thinks.

[51] See Ovid, Met. xv. 322. It sems to be uncertain whether it was at this lake or the adjoining spring of Lusi above-mentioned, that the daughters of Prœtus were purified by Melampus. See the "Eliaca" of Pausanias.

[52] In B. ii. c. 106.

[53] See B. ii. c. 106. As Ajasson remarks, Mucianus should have had the sense to see that it was only a juggle of the priests of Bacchus. He

Andros, consecrated to Father Liber, from which wine flows during the seven days appointed for the yearly festival of that god, the taste of which becomes like that of water the moment it is taken out of sight of the temple.

CHAP. 14.—WATERS WHICH SERVE AS A SUBSTITUTE FOR OIL.

Polyclitus says, that the water[54] of the river Liparis,[55] near Soli, in Cilicia, is used as a substitute for oil, and Theophrastus mentions a spring of that name in Æthiopia, which is possessed of similar properties. Lycus says, that at Tasitia[56] there is a fountain of it, the water of which emits light: the same is asserted, too, of a spring at Ecbatana. According to Theopompus, there is a lake at Scotussa,[57] the waters of which heal wounds.

CHAP. 15.—SALT AND BITTER WATERS.

Juba says, that in the country of the Troglodytæ there is a lake, called the "Lake of Insanity,"[58] from its highly noxious properties: thrice a day it becomes salt and bitter, and then again fresh, the same taking place as many times during the night. It is full, he says, of white serpents, twenty cubits long.[59] He mentions, also, a certain spring in Arabia, which rises from the ground with such remarkable force, as to throw back any object pressed down upon it, however weighty.

CHAP. 16.—WATERS WHICH THROW UP STONES. WATERS WHICH CAUSE LAUGHTER AND WEEPING. WATERS WHICH ARE SAID TO BE CURATIVE OF LOVE.

Theophrastus makes mention of the fountain of Marsyas,

compares it to the miracle of the blood of St. Januarius at Naples. The contrivance of the priests of Bel was not very dissimilar; but in their case, *they themselves* were the real recipients of what the god was supposed to devour.

[54] He no doubt alludes to "petroleum," rock-oil, or Barbadoes tar.

[55] So called from the Greek λιπαρὸς, "unctuous."

[56] A new reading given by Sillig in place of "India," the former one. Tasitia is the name of a district mentioned by Ptolemy, iv. 7, 15, as being in Æthiopia. He alludes to a burning spring, probably, of naphtha or of petroleum. The burning springs of Bakou in the East are well known. Genoa is lighted with naphtha from the village of Amiano, in Parma.

[57] In Macedonia. [58] "Lacum insanum."

[59] Juba has been deceived, Ajasson remarks, by the tales of travellers, there being no serpents of this length in Africa, except boas. He thinks that large congers, and other similar fishes, may be the animals really alluded to.

near the city of Celænæ, in Phrygia, which throws up masses of stone. Not far from it are two other springs, called Clæon[60] and Gelon by the Greeks, from the effects which they respectively produce. At Cyzicus is a fountain known as that of Cupido, the waters of which, Mucianus believes,[61] cure those who drink thereof of love.

CHAP. 17.—WATERS WHICH PRESERVE THEIR WARMTH FOR THREE DAYS.

At Crannon[62] there are certain hot springs, though not at boiling heat, the water of which, mixed with wine, preserves it warm in the vessels for a period of three days. The same is the case, too, with the springs of Mattiacum[63] in Germany, beyond the river Rhenus, the water of which retains its boiling heat three days. The margin of these springs is covered with pumice, formed by the action of the water.

CHAP. 18.—OTHER MARVELLOUS FACTS CONNECTED WITH WATER. WATERS IN WHICH EVERYTHING WILL SINK. WATERS IN WHICH NOTHING WILL SINK.

If any of the above-mentioned facts have the appearance of being incredible to a person, I would have him know that there is no department of Nature which presents greater marvels than this, independently of the numerous peculiarities which have been already mentioned[64] in an earlier part of this work. Ctesias informs us that, in India, there is a lake of standing water, upon which nothing[65] will float, every object instantly sinking to the bottom. Cælius says that in the waters of Lake Avernus,[66] in our own part of the world, the very leaves of the trees even will sink; and, according to Varro, these waters are fatal to such birds as fly towards them.

On the other hand, again, in the waters of Lake Apuscidamus,[67] in Africa, nothing will sink; the same, too, Apion tells

[60] From κλαίειν, "to weep," and γελᾶν, "to laugh."

[61] His credulity, we have seen already, was pretty extensive.

[62] In Thessaly.

[63] At the town called "Aquæ Mattiacæ," the modern Wiesbaden.

[64] In B. ii. c. 106.

[65] Sotion, professing to quote from Ctesias, says that it rejected everything placed on its waters, and hurled it back upon dry land.

[66] Whence, as it was said, its name, ἄορνος, "Without birds." Strabo ridicules this story.

[67] M. Douville says that in the interior of Africa there is a lake called

us, with the fountain of Plinthia in Sicily, as also a certain lake in Media, and the well of Saturn. The spring of Limyra[68] not unfrequently makes its way through the neighbouring localities, and when it does so, is always portentous of some coming event. It is a singular thing too, that the fish always accompany its waters on these occasions; the inhabitants of the adjoining districts being in the habit of consulting them by offering them food. When the fishes seize it with avidity, the answer is supposed to be favourable; but if, on the other hand, they reject the food, by flapping it with their tails, the response is considered to be unfavourable. The river Holcas, in Bithynia, runs close to Bryazus,[69] the name of a temple and of a divinity there worshipped; persons guilty of perjury, it is said, cannot endure contact with its waters, which burn like flame.[70]

The sources, too, of the Tamaricus,[71] a river of Cantabria, are considered to possess certain powers of presaging future events: they are three in number, and, separated solely by an interval of eight feet, unite in one channel, and so form a mighty stream. These springs are often dry a dozen times in the day, sometimes as many as twenty, without there being the slightest trace of water there: while, on the other hand, a spring close at hand is flowing abundantly and without intermission. It is considered an evil presage when persons who wish to see these springs find them dry: a circumstance which happened very recently, for example, to Lartius Licinius,[72] who held the office of legatus after his prætorship; for at the end of seven days after his visit he died.

In Judæa there is a river[73] that is dry every Sabbath day.

### CHAP. 19.—DEADLY WATERS. POISONOUS FISHES.

There are other marvels again, connected with water, but of

Kalouga Kouffoua, or the Dead Lake, the surface of which is covered with bitumen and naphtha, which contains no fish, has oleaginous waters, and presents all the phænomena of the Dead Sea.

[68] In Lycia.

[69] Hardouin is of opinion that a river also was so called. See B. v. c. 43. Of the divinity of this name, nothing further is known.

[70] A story evidently connected with a kind of ordeal.

[71] See B. iv. c. 34. Intermittent springs are not uncommon. See B. ii. c. 106.

[72] See B. xix. c. 11.

[73] According to Elias of Thisbe this river was the Goza; but Holstenius says that it was the Eleutherus, or one of its tributaries. Josephus says that it flowed on the Sabbath day, and was dry the other six.

a more fatal nature. Ctesias states in his writings, that there is a spring in Armenia, the fishes in which are black,[74] and, if used as food, productive of instantaneous death. I have heard the same, too, with reference to the waters near the sources of the river Danuvius,[75] until a spring is reached which is near its main channel, and beyond which this poisonous kind of fish is not to be found. Hence it is that this spot is generally looked upon as the source of the river. The same, too, is reported of the Lake of the Nymphs, in Lydia. Near the river Pheneus, in Achaia, there flows from the rocks a spring known as the Styx, the waters of which, as already[76] stated, are instantly fatal. And not only this, but there are also small fish in it, Theophrastus says, which are as deadly as the water, a thing that is not the case with the fish of any other poisonous springs. Theopompus says, that at the town of Cychri, in Thrace, the waters are deadly; and Lycus states, that at Leontium[77] there is a spring, the waters of which are fatal at the end of a couple of days to those who drink thereof. Varro speaks also of a spring upon Mount Soracte, some four feet in breadth, the waters of which bubble forth at sunrise, as though they were boiling; birds, he says, which only taste thereof, fall dead close by.

And then, besides, we meet with this insidious circumstance, that in some cases, waters of this nature are inviting even in their appearance; those at Nonacris, in Arcadia, for example, the water of which fountain possesses no apparent quality to excite mistrust, though, owing to its intense coldness, it is generally looked upon as highly injurious, seeing that it petrifies as it flows. It is otherwise with the waters of Tempe, in Thessaly, their baneful properties inspiring universal terror, and possessing the property of corroding copper even and iron, it is said. This stream runs a short distance only, as already stated;[78] and it is truly marvellous that, according to general report, the banks of its source[79] are surrounded with the roots of a wild carob,[80] always covered with purple flowers,

[74] Ajasson thinks that he means, grey. He remarks also, that it is a matter of doubt whether there are any fishes that are poisonous.

[75] The Danube.

[76] In B. ii. c. 106, see also B. xxx. c. 53.

[77] See B. iii. c. 14, and B. xviii. c. 21.

[78] In B. iv. c. 15.

[79] He alludes, according to Dalechamps, to the Eurotas, a tributary, and not the source, of the Peneus. See B. iv. c. 8.

[80] "Siliquâ."

while the margin is clothed with a green herbaceous plant of a peculiar species. In Macedonia, not far from the tomb of the Poet Euripides, is the confluence of two streams, the water of one of which is extremely wholesome, that of the other fatal.

CHAP. 20.—WATERS WHICH PETRIFY, THEMSELVES, OR CAUSE OTHER OBJECTS TO PETRIFY.

At Perperena,[81] there is a spring which petrifies[82] the ground wherever it flows, the same being the case also, with the hot waters at Ædepsus, in Eubœa; for there, wherever the stream falls, the rocks are continually increasing in height. At Eurymenæ,[83] chaplets, when thrown into the waters of a certain fountain there, are turned to stone. At Colossæ there is a river, into the water of which if bricks[84] are thrown, when taken out they are found changed into stone. In the mines of Scyros, the trees petrify that are watered by the river, branches and all. In the caverns of Mount Corycus, the drops of water that trickle down the rocks become hard in the form of a stone.[85] At Mieza, too, in Macedonia, the water petrifies as it hangs from the vaulted roofs of the rocks; but at Corycus it is only when it has fallen that it becomes hard.

In other caverns, again, the water petrifies both ways,[86] and so forms columns; as we find the case in a vast grotto at Phausia, a town of the Chersonesus[87] of the Rhodians, the columns of which are tinted with various colours. These instances will suffice for the present.

CHAP. 21. (3.)—THE WHOLESOMENESS OF WATERS.

It is a subject of enquiry among medical men, which kind of water is the most beneficial. They condemn, and with justice, all stagnant, sluggish, waters, and are of opinion that running water is the best, being rendered lighter and more

[81] A town of Mysia, south of Adramyttium.

[82] As Ajasson remarks, numerous instances are known of this at the present day. Pliny, however, does not distinguish the *incrusting* springs from the *petrifying* springs.

[83] In Thessaly, according to Hecatæus.

[84] "Lateres." He means unburnt bricks, probably.

[85] He alludes to stalactites and stalagmites.

[86] Both on the roof and on the floor.

[87] In Caria, opposite Rhodes.

salubrious by its current and its continuous agitation. Hence it is that I am much surprised that persons should be found to set so high a value as they do, upon cistern water. These last give as their reason, however, that rain-water must be the lightest water of all, seeing that it has been able to rise[88] aloft and remain suspended in the air. Hence it is, too, that they prefer snow-water to rain-water, and ice, again, to snow, as being water subtilized to the highest possible degree; on the ground that snow-water and ice-water must be lighter than ordinary water, and ice, of necessity, considerably lighter. It is for the general interest, however, of mankind, that these notions should be refuted. For, in the first place, this comparative lightness which they speak of, could hardly be ascertained in any other way than by the sensation, there being pretty nearly no difference at all in weight between the kinds of water. Nor yet, in the case of rain-water, is it any proof of its lightness that it has made its way upwards into the air, seeing that stones,[89] it is quite evident, do the same: and then, besides, this water, while falling, must of necessity become tainted with the vapours which rise from the earth; a circumstance owing to which it is, that such numerous impurities[90] are to be detected in rain-water, and that it ferments[91] with such extreme rapidity.

I am, surprised, too, that snow[92] and ice should be regarded as the most subtilized states of this element, in juxtaposition with the proofs supplied us by hail, the water of which, it is generally agreed, is the most pernicious of all to drink. And then, besides, there are not a few among the medical men themselves, who assert that the use of ice-water and snow-water is highly injurious, from the circumstance that all the more refined parts thereof have been expelled by congelation. At all events, it is a well-ascertained fact that the volume of every liquid is diminished by congelation; as also that exces-

[88] Rain-water really is the lightest, but the reason here given is frivolous, for it does not ascend as water, but as vapour.

[89] See B. ii. c. 38. Before venturing on this argument, he should have been certain as to the circumstances under which aërolites are generated, a question which still remains hidden in mystery.

[90] Ajasson remarks that this is only the case in the water of heavy falls of rain after long drought.

[91] "Calefiat."

[92] Snow-water is pernicious in a very high degree, being the fruitful source of goitre and cretinism.

sive dews[92*] a reproductive of blight in corn, and that hoar-frosts result in blast; of a kindred nature, both of them, to snow. It is generally agreed, too, that rain-water putrefies with the greatest rapidity, and that it keeps but very badly on a voyage. Epigenes, however, assures us that water which has putrefied seven times and as often purified[93] itself, will no longer be liable to putrefaction. As to cistern-water, medical men assure us that, owing to its harshness, it is bad for the bowels and throat;[94] and it is generally admitted by them that there is no kind of water that contains more slime or more numerous insects of a disgusting nature. But it does not, therefore, follow that river water is the best of all, or that, in fact, of any running stream, the water of many lakes being found to be wholesome in the very highest degree.

What water, then, out of all these various kinds, are we to look upon as best adapted for the human constitution? Different kinds in different localities, is my answer. The kings of Parthia drink no water but that of the Choaspes[95] or of the Eulæus, and, however long their journies, they always have this water carried in their suite. And yet it is very evident that it is not merely because this water is river-water that it is thus pleasing to them, seeing that they decline to drink the water of the Tigris, Euphrates, and so many other streams.

### CHAP. 22.—THE IMPURITIES OF WATER.

Slime[96] is one great impurity of water: still, however, if a river of this description is full of eels, it is generally looked upon as a proof[97] of the salubrity of its water; just as it is regarded as a sign of its freshness when long worms[98] breed in the water of a spring. But it is bitter water, more particularly, that is held in disesteem, as also the water which swells the stomach the moment it is drunk, a property which belongs

92* See B. xvii. c. 44, and B. xviii. c. 68.

93 This is somewhat similar to what is said of the putrefaction and purification of Thames water, on a voyage.

94 "Inutilis alvo duritia faucibusque." The passage is probably corrupt.

95 See B. vi. c. 27.

96 Or "mud"—"limus." All rivers of necessity have it, in a greater or less degree.

97 On the contrary, the more the mud and slime, the more numerous the eels.

98 "Tænias."

to the water at Trœzen. As to the nitrous[99] and salso-acid[1] waters which are found in the deserts, persons travelling across towards the Red Sea render them potable in a couple of hours by the addition of polenta, which they use also as food. Those springs are more particularly condemned which secrete mud,[2] or which give a bad complexion to persons who drink thereof. It is a good plan, too, to observe if water leaves stains upon copper vessels; if leguminous vegetables boil with difficulty in it; if, when gently decanted, it leaves an earthy deposit; or if, when boiled, it covers the vessel with a thick crust.[3]

It is a fault also in water,[3*] not only to have a bad smell,[4] but to have any flavour[5] at all, even though it be a flavour pleasant and agreeable in itself, or closely approaching, as we often find the case, the taste of milk. Water, to be truly wholesome, ought to resemble air[6] as much as possible. There is only one[7] spring of water in the whole universe, it is said, that has an agreeable smell, that of Chabura, namely, in Mesopotamia: the people give a fabulous reason for it, and say that it is because Juno[8] bathed there. Speaking in general terms, water, to be wholesome, should have neither taste nor smell.

## CHAP. 23.—THE MODES OF TESTING WATER.

Some persons judge of the wholesomeness of water through the agency of a balance:[9] their pains, however, are expended to little purpose, it being but very rarely that one water is

[99] Waters, probably, impregnated with mineral alkali. As to the "nitrum" of Pliny, see c. 46 of this Book.

[1] "Salmacidas." [2] "Cœnum."

[3] Also, Ajasson says, to observe whether soap will melt in it. If it will not, it is indicative of the presence of selenite.

[3*] As drinking water.

[4] As Plautus says of women, Mostell, A. i. S. 3—"They smell best, when they smell of nothing at all." [5] See B. xv. c. 32.

[6] In purity and tastelessness. As Ajasson observes, Pliny could hardly appreciate the correctness of this remark, composed as water is of two gases, oxygen and hydrogen.

[7] Pausanias and Athenæus mention also the well of Mothone in Peloponnesus, the water of which exhaled the odour of the perfumes of Cyzicus. Such water, however, must of necessity be impure.

[8] More probably Astarte, Fée thinks, Juno being unknown in Mesopotamia.

[9] "Statera." Ajasson remarks that it does not require an instrument *very* nicely adjusted to indicate the difference in weight between pure and

lighter than another. There is, however, a more certain mode of ascertaining the difference in quality, that water being the better of the two which becomes hot and cold with the greatest rapidity: in addition to which, not to keep poising a balance,[10] after water has been drawn up in vessels, if it is good, it should gradually become warmer, they say, when placed upon the ground. Which water, then, of the several kinds will be most likely to be good and wholesome? Well-water, no doubt, if we are to judge from the general use made of it in cities: but only in the case of wells in which it is kept in continual agitation by repeated drawing, and is refined by the earth acting as a filter. These conditions are sufficient to ensure salubrity in water: in regard to coolness, the well must be in a shaded spot, and the water kept exposed to the air. There is, however, one thing above all to be observed, a point, too, of considerable importance with reference to the continuance of the flow—the spring must issue from the bed of the well, and not from the sides. To make water cold to the touch may be effected artificially even, either by forcing it to rise aloft or by making it fall from a height, and so come in collision with the air, and become incorporated[11] therewith: for in swimming,[12] we find, when we hold our breath, the water is felt to be all the colder.

It was the Emperor Nero's invention[13] to boil water, and then enclose it in glass vessels and cool it in snow; a method which ensures all the enjoyment of a cold beverage, without any of the inconveniences resulting from the use of snow. Indeed, it is generally admitted that all water is more[14] wholesome when

very impure water. Synesius, Ep. xv., gives an account of the "hydroscopium" used by the ancients for ascertaining the weight of water. Beckmann enters into a lengthy examination of it, as also an enquiry into the question whether the ancients, and among them Pliny, were acquainted with the hydrometer. See his *Hist. Inv.* Vol. II. pp. 163—169. *Bohn's Ed.*

[10] "Ne manus pendeant." These words, which Hardouin pronounces to be full of obscurity, have caused considerable discussion. The passage appears to be imperfect, but it is not improbable that he alludes to the use of the balance or scales for ascertaining the comparative wholesomeness of water.

[11] "Corripiat."

[12] The thread of his reasoning is not *very* perceptible; but he seems to mean that the more air there is in a body the colder it is. If the air is inhaled by a person when eating peppermint, he will be sensible of a cold feeling in the mouth.

[13] Galen believes this method to have been known to Hippocrates, and Aristotle was undoubtedly acquainted with it. See Beckmann's *Hist. Inv.* Vol. II. pp. 143-4. *Bohn's Ed.*

[14] This is not at all the opinion at the present day.

it has been boiled; as also, that water when it has once been heated, will become more intensely[15] cold than before—a most ingenious discovery.[16] The best corrective of unwholesome water is to boil it down to one half. Cold water, taken internally, arrests hæmorrhage. By keeping cold water in his mouth, a person may render himself proof against the intense heat of the bath. Many a person knows by his own every-day experience, that water which is the coldest to drink is not of necessity the coldest to the touch, this delightful property being subject to considerable fluctuations.[17]

### CHAP. 24.—THE MARCIAN WATERS.

The most celebrated water throughout the whole world, and the one to which our city gives the palm for coolness and salubrity, is that of the Marcian[18] Spring, accorded to Rome among the other bounties of the gods: the name formerly given to the stream was the "Aufeian," the spring itself being known as "Pitonia." It rises[19] at the extremity of the mountains of the Peligni, passes through the territory of the Marsi and through Lake Fucinus, and then, without deviating, makes directly for Rome: shortly after this, it loses itself in certain caverns, and only reappears in the territory of Tibur, from which it is brought to the City by an arched aqueduct nine miles in length. Ancus Marcius, one of the Roman kings, was the first[20] who thought of introducing this water into the City. At a later period, the works were repaired by Quintus Marcius Rex: and, more recently, in his prætorship, by M. Agrippa.[21]

[15] "Magis refrigerari." The experiments made by Mariotte, Perrault, the Academy del Cimento, Mariana, and others, showed no perceptible difference in the time of freezing, between boiled and unboiled water; but the former produced ice harder and clearer, the latter ice more full of blisters. In later times, Dr. Black, of Edinburgh, has from his experiments asserted the contrary. "Boiled water," he says, "becomes ice sooner than unboiled, if the latter be left at perfect rest." Beckmann's *Hist. Inv.* Vol. II. p. 145. *Bohn's Ed.*

[16] "Subtilissimo invento."

[17] Or perhaps, as we say, "to the touch, and vice versâ." The original is "Alternante hoc bono."

[18] A considerable number of its arches are yet standing, and it still in part supplies Rome with water.

[19] At Sublaqueum, now Subiaco.

[20] "Primus auspicatus est." In obedience to the "auspices," probably.

[21] In A.U.C. 720. See B. xxxvi. c. 24.

CHAP. 25.—THE VIRGIN WATERS.

It was he, too, who brought the Virgin[22] Waters from the bye-road situate at the eighth milestone from the City, which runs for two miles along the Prænestine Way. Near these waters is the stream of Hercules, which the former shun, to all appearance, and have thence obtained[23] the name of "Virgin Waters." On instituting a comparison between the waters of these streams, the difference above-mentioned[24] may be immediately detected, the Virgin water being as much cooler to the touch, as the Marcian water is in taste. And yet, for this long time past, the pleasure of drinking these waters has been lost to the City, owing to the ambition and avarice of certain persons who have turned[25] them out of their course for the supply of their country-seats and of various places in the suburbs, to the great detriment of the public health.

CHAP. 26.—THE METHOD OF SEARCHING FOR WATER.

It will not be out of place to append here an account of the method employed in searching for water. Water is mostly to be found in valleys, whether formed by the intersection of declivities or lying at the lower part of mountains. Many persons have been of opinion that all places with a northern[26] aspect are naturally provided with water: a point upon which it will not be amiss to explain the diversities presented to us by Nature. On the south side of the mountains of Hyrcania it never rains; and hence it is that it is only on the north-east side that they are wooded. As for Olympus, Ossa, Parnassus, the Apennines, and the Alps, they are covered with wood on every side, and abundantly watered with streams. Some mountains, again, are wooded on the south side, the White[27] Mountains in Crete, for example. On this point, therefore, we may come to the conclusion that there is no rule which in all cases holds good.

[22] "Aqua Virgo." This aqueduct, erected A.U.C. 735, still exists, and bears the name of "Aqua Vergine."

[23] Another story was, that it had this name from the circumstance that the spring was first pointed out by a girl to some soldiers in search of water.

[24] In c. 23 of this Book.

[25] This was only temporarily, in all probability.

[26] There seems, as he says below, to be no general rule as to this point.

[27] So called from the snow on their summit.

CHAP. 27.—SIGNS INDICATIVE OF THE PRESENCE OF WATER.

The following are indications of the presence of water:—rushes, reeds, the plant mentioned with reference to this point already,[28] or frogs sitting squatted on a spot for a long time together. As to the wild[29] willow, alder, vitex, reed, and ivy, all of which grow spontaneously on low grounds in which there is a settling of rain water from higher localities, considered as indications of the presence of water, they are all[30] of them of a deceptive nature. A sign much more to be depended upon, is a certain misty exhalation, visible from a distance before sunrise. The better to observe this, some persons ascend an eminence, and lie flat at full length upon the ground, with the chin touching the earth. There is also another peculiar method of judging upon this point, known only to men of experience in these matters: in the very middle of the heats of summer they select the hottest hours of the day, and observe how the sun's rays are reflected in each spot; and if, notwithstanding the general dryness of the earth, a locality is observed to present a moist appearance, they make no doubt of finding water there.

But so intense is the stress upon the eyes in doing this, that it is very apt to make them ache; to avoid which inconvenience, they have recourse to other modes of testing. They dig a hole, for instance, some five feet in depth, and cover it with vessels of unbaked pottery, or with a copper basin well-oiled; they then place a burning lamp on the spot, with an arch-work over it of leaves, and covered with earth on the top. If, after a time, they find the pots wet or broken, the copper covered with moisture, or the lamp extinguished, but not from want of oil, or if a lock of wool that has been left there is found to be moist, it is a sign of the presence of water, beyond all doubt. With some persons it is the practice to light a fire on the spot before they dig the hole, a method which renders the experiment with the vessels still more conclusive.

CHAP. 28.—DIFFERENCES IN WATERS, ACCORDING TO THE NATURE OF THE SOIL.

The soil itself, too, gives indications of the presence of

[28] In B. xxvi. c. 16.

[29] "Salix erratica."

[30] Surely *not* the reed, as he has mentioned it above as one of the indications to be depended upon. In one MS. it appears to be omitted, and with justice, probably.

water, by presenting white spots, or an uniformly green appearance: for where the stratum is black the springs are mostly not of a permanent nature. The presence of potter's clay always puts an end to all hopes of finding water, and the excavation is immediately abandoned; an eye being carefully kept to the strata[31] of the earth, to see whether, beginning with black mould, it successively presents the appearances above-mentioned. The water is always fresh that is found in argillaceous soils, but in a stratum of tufa it is colder than elsewhere; this, indeed, being a soil which is highly approved of, as having a tendency to make the water pure and extremely light to the stomach, and, by its action as a filter, to withhold all impurities. The presence of sand[32] gives indications of springs of but limited extent, and of water impregnated with slime; while that of gravel announces the presence of water of excellent flavour, but not to be depended upon for permanence. Male[33] sand, fine sea[34]-sand, and charcoal[35] earth, yield a constant supply of water of a highly wholesome quality; but it is the presence of red stones that is the most to be depended upon, and the water found there is of the very finest quality. Craggy localities at the foot of mountains, and silicious soils, are equally good; in addition to which, the water found there is cooler than elsewhere.

In boring for water, the soil should always become more and more humid, and, the deeper the descent, with the greater facility the implements should penetrate. In deep-sunk wells, the presence of sulphureous[36] or aluminous substances is fatal to the sinkers; a danger that may be guarded against by letting down a lighted lamp, and ascertaining whether the flame is extinguished. When such is found to be the case, it is the practice to sink vent-holes on each side of the well, both right and left, in order to receive and carry off the noxious exhalations. Independently of these evils, the air becomes heavier, from the great depth merely of the excavation, an inconvenience which is remedied by keeping up a continual circulation with ventilators of linen cloth. As soon as water is reached, walls

31 "Coria." 32 "Sabulum."

33 "Sabulum masculum." Coarse, reddish sand, Dalechamps says.

34 "Arena." 35 See B. xvii. c. 3.

36 An inconvenience neutralized in a considerable degree by Davy's invention of the safety-lamp.

are constructed at the bottom, but without cement,[37] in order that the springs may not be intercepted.

Some waters, the sources of which do not lie on elevated ground, are coldest at the beginning of spring, being maintained by the winter rains in fact. Others, again, are coldest at the rising of the Dog-star—peculiarities, both of them, to be witnessed at Pella in Macedonia; for in front of that city there is a marsh-spring, which at the beginning of summer is cold, while in the more elevated parts of the city the water is ice-cold[38] in the hottest days of summer. The same is the case, too, at Chios, the water-supply of the harbour and of the city occupying the same relative positions. At Athens, the water of the Fountain Enneacrunos[39] is colder in a cloudy summer than the well there in the garden of Jupiter; while on the other hand, this last is ice-cold during the drought of a hot summer. For the most part, however, wells are coldest about the rising of Arcturus.[40]

(4.) The water-supply of wells never fails in summer, but in all cases it falls low during four days at the rising of the constellation above-mentioned. Throughout the whole winter, on the other hand, many wells entirely fail; as in the neighbourhood of Olynthus, for example, where the water returns in the early days of spring. In Sicily too, in the vicinity of Messana and Mylæ, the springs are entirely dry throughout the winter, while in summer they overflow and form quite a river. At Apollonia in Pontus there is to be seen, near the sea-shore, a fountain which overflows in summer only, and mostly about the rising of the Dog-star; should the summer, however, not be so hot as usual, its water is less abundant. Certain soils become drier in consequence of rain, that in the territory of Narnia for example: a fact which M. Cicero has mentioned in his "Admiranda," with a statement that drought is there productive of mud, and rain of dust.[41]

### CHAP. 29.—THE QUALITIES OF WATER AT THE DIFFERENT SEASONS OF THE YEAR.

Every kind of water is freshest in winter, not so fresh in

[37] "Arenatum." Properly a mortar, which consisted of one part lime and two parts sand.

[38] "Riget."

[39] See B. iv. c. 11. At Bisley, in Surrey, there is a spring, Aubrey says, that is cold in summer and warm in winter.

[40] See B. xviii. c. 7.

[41] The sandy soil being dried in hot weather into masses of mud or clay, which become loosened when rain falls.

summer, still less so in autumn, and least of all in times of drought. River-water, too, is by no means always the same in taste, the state of the bed over which it runs making a considerable difference. For the quality of water, in fact, depends upon the nature of the soil through which it flows, and the juices[42] of the vegetation watered by it; hence it is that the water of the same river is found in some spots to be comparatively unwholesome. The confluents, too, of rivers, are apt to change the flavour of the water, impregnating the stream in which they are lost and absorbed; as in the case of the Borysthenes, for example. In some instances, again, the taste of river-water is changed by the fall of heavy rains. It has happened three times in the Bosporus that there has been a fall of salt rain, a phænomenon which proved fatal to the crops. On three occasions, also, the rains have imparted a bitterness to the overflowing streams of the Nilus, which was productive of great pestilence throughout Egypt.

CHAP. 30.—HISTORICAL OBSERVATIONS UPON WATERS WHICH HAVE SUDDENLY MADE THEIR APPEARANCE OR SUDDENLY CEASED.

It frequently happens that in spots where forests have been felled, springs of water make[43] their appearance, the supply of which was previously expended in the nutriment of the trees. This was the case upon Mount Hæmus for example, when, during the siege by Cassander,[44] the Gauls cut down a forest for the purpose of making a rampart. Very often too, after removing the wood which has covered an elevated spot and so served to attract and consume the rains, devastating torrents are formed by the concentration of the waters. It is very important also, for the maintenance of a constant supply of water, to till the ground and keep it constantly in motion, taking care to break and loosen the callosities of the surface crust: at all events, we find it stated, that upon a city of Crete, Arcadia by name, being razed to the ground, the springs and water-courses, which before were very numerous in that locality, all at once dried up; but that, six years after, when

[42] See B. ii. c. 106.

[43] Ajasson remarks, that just the converse of this has been proved by modern experience to be the case.

[44] The son of Antipater, then acting for Alexander during his absence in the East.

the city was rebuilt, the water again made its appearance, just as each spot was again brought into cultivation.

(5.) Earthquakes also are apt to discover or swallow[45] up springs of water; a thing that has happened, it is well known, on five different occasions in the vicinity of Pheneus, a town of Arcadia. So too, upon Mount Corycus,[46] a river burst forth; after which, the soil was subjected to cultivation. These changes are very surprising where there is no apparent cause for them; such as the occurrence at Magnesia,[47] for instance, where the warm waters became cold, but without losing their brackish flavour; and at the Temple[48] of Neptune in Caria, where the water of the river, from being fresh, became salt. Here, too, is another fact, replete with the marvellous—the fountain of Arethusa at Syracuse has a smell of dung, they say, during the celebration of the games at Olympia,[49] a thing that is rendered not improbable by the circumstance,[50] that the river Alpheus makes its way to that island beneath the bed of the sea. There is a spring in the Chersonesus of the Rhodians[50*] which discharges its accumulated impurities every nine years.

Waters, too, sometimes change their colour; as at Babylon, for example, where the water of a certain lake for eleven days in summer is red. In the summer season, too, the current of the Borysthenes[51] is blue, it is said, and this, although its waters are the most rarefied in existence, and hence float upon the surface of those of the Hypanis;[52]—though at the same time there is this marvellous fact, that when south winds prevail, the waters of the Hypanis assume the upper place. Another proof, too, of the surpassing lightness of the water of the Borysthenes, is the fact that it emits no exhalations, nor, indeed, the slightest vapour even. Authors that would have the credit of diligent research in these enquiries, assure us that water becomes heavier after the winter-solstice.

[45] See B. ii. c. 84.

[46] In Cilicia.

[47] Whether he means the district of Thessaly so called, or one of the two cities of that name in Lydia, does not appear to be known.

[48] Its locality is unknown, but it was probably near the sea-shore.

[49] In Elis in Peloponnesus.

[50] His credulity is influenced by the popular story that the river Alpheus in Peloponnesus, in its love for the Fountain Nymph Arethusa, penetrated beneath the bed of the sea, and reappeared in Sicily. See B. iii. c. 14.

[50*] See c. 20.

[51] The modern Dnieper.

[52] The Bong.

CHAP. 31. (6.)—THE METHOD OF CONVEYING WATER.

The most convenient method of making a watercourse from the spring is by employing earthen pipes, two fingers in thickness, inserted in one another at the points of junction—the one that has the higher inclination fitting into the lower one—and coated with quick-lime macerated in oil. The inclination, to ensure the free flow of the water, ought to be at least one-fourth of an inch to every hundred feet; and if the water is conveyed through a subterraneous passage, there should be air-holes let in at intervals of every two[53] actus. Where the water is wanted to ascend[54] aloft, it should be conveyed in pipes of lead: water, it should be remembered, always rises to the level of its source. If, again, it is conveyed from a considerable distance, it should be made to rise and fall every now and then, so as not to lose its motive power. The proper length for each leaden pipe is ten feet; and if[55] the pipe is five fingers in circumference its weight should be sixty pounds; if eight feet, one hundred; if ten, one hundred and twenty; and so on in the same proportion.

A pipe is called "a ten-finger"[56] pipe when the sheet of metal is ten fingers in breadth before it is rolled up; a sheet one half that breadth giving a pipe "of five fingers."[57] In all sudden changes of inclination in elevated localities, pipes of five fingers should be employed, in order to break the impetuosity of the fall: reservoirs,[58] too, for branches should be made as circumstances may demand.

CHAP. 32—HOW MINERAL WATERS SHOULD BE USED.

I am surprised that Homer has made no[59] mention of hot springs, when, on the other hand, he has so frequently introduced the mention of warm baths: a circumstance from which we may safely conclude that recourse was not had in his time to mineral waters for their medicinal properties, a thing so universally the case at the present day. [Waters impregnated

[53] See B. xviii. c. 3, and the Introduction to Vol. III.

[54] In jets, he means.

[55] "Si quinariæ erunt."

[56] "Denaria."

[57] "Quinaria."

[58] The name given to these reservoirs was "castellum" or "dividiculum:" in French the name is "*regard*." Vitruvius describes them, B. vii. c. 7.

[59] Pliny appears to have forgotten the warm springs of the Scamander, mentioned by Homer in the Iliad, B. xxii. l. 147, *et seq.*

with sulphur are good for the sinews,[60] and aluminous waters are useful for paralysis and similar relaxations of the system. Those, again, which are impregnated with bitumen or nitre, the waters of Cutilia,[61] for example, are drunk as a purgative.[62]

Many persons quite pride themselves on enduring the heat of mineral waters for many hours together; a most pernicious practice, however, as they should be used but very little longer than the ordinary bath, after which the bather should be shampooed[63] with cold water, and not leave the bath without being rubbed with oil. This last operation, however, is commonly regarded as altogether foreign to the use of mineral baths; and hence it is, that there is no situation in which men's bodies are more exposed to the chances of disease, the head becoming saturated with the intensity of the odours exhaled, and left exposed, perspiring as it is, to the coldness of the atmosphere, while all the rest of the body is immersed in the water.[64]

There is another mistake, also, of a similar description, made by those who pride themselves upon drinking enormous quantities of these waters;[65] and I myself have seen persons, before now, so swollen with drinking it that the very rings on their fingers were entirely concealed by the skin, owing to their inability to discharge the vast quantities of water which they had swallowed. It is for this reason, too, that these waters should never be drunk without taking a taste of salt every now and then. The very mud,[66] too, of mineral springs may be employed to good purpose; but, to be effectual, after being applied to the body, it must be left to dry in the sun.

It must not be supposed, however, that all hot waters are

[60] Or rather, as Ajasson says, for cutaneous diseases.

[61] See B. iii. c. 17.

[62] In conformity with Sillig's suggestion, we reject "atque" as an interpolation.

[63] "Mulceri."

[64] In spite of what Pliny says, in some cases the use of a mineral bath is recommended for a long period of time together. At Leuk or Læch, for instance, in the Valais, the patients, Ajasson says, remain in the bath as much as eight hours together.

[65] To promote expectoration, Dalechamps says; or rather vomiting, according to Holland.

[66] This substance, Ajasson says, is still used in medicine; that of the waters of Silvanez, for example, in the department of Aveyron, is highly celebrated for the cure of inveterate ulcers and sciatica. The mud baths, too, of Saint Amand, enjoy an European reputation.

of necessity medicated, those of Segesta in Sicily, for example, of Larissa, Troas, Magnesia, Melos, and Lipara. Nor is the very general supposition a correct one, that waters, to be medicinal, must of necessity discolour copper or silver; no such effect being produced by those of Patavium,[67] or there being the slightest difference perceptible in the smell.

CHAP. 33.—THE USES OF SEA-WATER. THE ADVANTAGES OF A SEA-VOYAGE.

Sea-water also is employed in a similar manner for the cure of diseases. It is used, made hot, for the cure of pains in the sinews, for reuniting fractured bones, and for its desiccative action upon the body: for which last purpose, it is also used cold. There are numerous other medicinal resources derived from the sea; the benefit of a sea-voyage, more particularly, in cases of phthisis, as already[68] mentioned, and where patients are suffering from hæmoptosis, as lately experienced, in our own memory, by Annæus Gallio,[69] at the close of his consulship:[70] for it is not for the purpose of visiting the country, that people so often travel to Egypt, but in order to secure the beneficial results arising from a long sea-voyage. Indeed, the very sea-sickness that is caused by the rocking of the vessel to and fro, is good for many affections of the head, eyes, and chest, all those cases, in fact, in which the patient is recommended to drink an infusion of hellebore. Medical men consider sea-water, employed by itself, highly efficacious for the dispersion of tumours, and, boiled with barley-meal, for the successful treatment of imposthumes of the parotid glands: it is used also as an ingredient in plasters, white plasters more particularly, and for emollient[71] poultices. Sea-water is very good, too, employed as a shower-bath; and it is taken internally, though not without[72] injury to the stomach, both as a

[67] See B. ii c. 106.

[68] In B. xxiv. c. 19, and B. xxviii. c. 14.

[69] An elder brother of the philosopher Seneca. His original name was M. Annæus Noratus; but upon being adopted by the rhetorician Junius Gallio, he changed his name into L. Junius Annæus—or Annæanus—Gallio. He destroyed himself, A.D. 65.

[70] He was "Consul subrogatus" only.

[71] "Malagmatis."

[72] It acts in most cases as an emetic, and is highly dangerous if taken in considerable quantities.

purgative and as an expellent, by vomit and by alvine evacuation, of black bile[73] or coagulated blood, as the case may be.

Some authorities prescribe it, taken internally, for quartan fevers, as also for tenesmus and diseases of the joints; purposes for which it is kept a considerable time, to mellow with age, and so lose its noxious[74] properties. Some, again, are for boiling it, but in all cases it is recommended to be taken from out at sea, and untainted with the mixture of fresh water, an emetic also being taken before using it. When used in this manner, vinegar or wine is generally mixed with the water. Those who give it unmixed, recommend radishes with oxymel to be eaten upon it, in order to provoke vomiting. Sea-water, made hot, is used also as an injection; and there is nothing in existence preferred to it as a fomentation for swellings of the testes, or for chilblains before they ulcerate. It is similarly employed, also, for the cure of prurigo, itch-scab, and lichens. Lice and other foul vermin of the head, are removed by the application of sea-water, and lividities of the skin are restored to their natural colour; it being a remarkably good plan, in such cases, after applying the sea-water, to foment the parts with hot vinegar.

It is generally considered, too, that sea-water is highly efficacious for the stings of venomous insects, those of the phalangium and scorpion, for example, and as an antidote to the poisonous secretions of the asp, known as the "ptyas;"[75] in all which cases it is employed hot. Fumigations are also made of it, with vinegar, for the cure of head-ache; and, used warm as an injection, it allays griping pains in the bowels and cholera. Things that have been heated in sea-water are longer than ordinary in cooling. A sea-water bath is an excellent corrective for swelling[76] of the bosoms in females, affections of the thoracic organs, and emaciation of the body. The steam also of sea-water boiled with vinegar, is used for the removal of hardness of hearing and head-ache. An application of sea-water very expeditiously removes rust upon iron; it is

[73] It is still considered useful, Ajasson says, for the treatment of lymphatic diseases.

[74] "Virus." [75] Or "spitter." See B. xxviii. c. 18.

[76] "Mammas sororiantes." A malady, according to Dalechamps, in which the mamillæ are so distended with milk that they kiss, like sisters —"sorores."

curative also of scab in sheep, and imparts additional softness to the wool.

### CHAP. 34.—HOW ARTIFICIAL SEA-WATER MAY BE MADE IN PLACES AT A DISTANCE FROM THE SEA.

I am by no means unaware that these details may very possibly appear superfluous to persons who live at a distance from the sea; but scientific research has made provision against this objection, by discovering a method of enabling every one to make sea-water[77] for himself. It is a singular fact in connexion with this discovery, that if more than one sextarius of salt is put into four sextarii of water, the liquefying properties of the water will be overpowered, and the salt will no longer melt. On the other hand, again, a mixture of one sextarius of salt with four sextarii of water, acts as a good substitute for the efficacy and properties of the very saltest sea-water. The most reasonable proportion, however, is generally thought to be eight cyathi of salt, diluted in the quantity of water above mentioned; a preparation which has been found to have a warming effect upon the sinews, without in any degree chafing the body.

### CHAP. 35.—HOW THALASSOMELI IS MADE.

There is also a composition made to ripen for use, known as "thalassomeli,"[78] and prepared with equal parts of sea-water, honey, and rain-water. For this purpose, also, the water is brought from out at sea, and the preparation is kept in an earthen vessel well pitched. It acts most efficiently as a purgative, and without in the least fatiguing the stomach; the taste, too, and smell of it, are very agreeable.

### CHAP. 36.—HOW HYDROMELI IS MADE.

Hydromeli,[79] also, was a mixture formerly made with pure rain-water and honey, and was prescribed for patients who were anxious for wine, as being a more harmless drink. For these many years past, however, it has been condemned, as having in reality all the inconveniences of wine, without the advantages.

[77] The ancients being unable to analyze sea-water, could only imitate it very clumsily.

[78] "Sea-water honey."

[79] See B. xiv. c. 20, and B. xxii. c. 51. He is speaking, probably, of fermented hydromel, a sort of mead.

### CHAP. 37.—METHODS OF PROVIDING AGAINST THE INCONVENIENCE OF DRINKING SUSPECTED WATER.

As persons out at sea often suffer great inconvenience from the want of fresh water, we will here describe some methods of obviating it. Fleeces are spread round the ship, and on becoming moistened with the exhalations arising from the sea, the water is wrung from them, and found to be quite fresh. Hollow balls of wax, also, or empty vessels sealed at the mouth, upon being let down into the sea in a net, become filled with water that is fresh and potable. On shore, too, sea-water may be made fresh, by filtering it through argillaceous earth.

By swimming in water of any kind, sprains of the limbs in man or beast are reduced[80] with the greatest facility. Persons when travelling, are sometimes apprehensive that the use of water, the quality of which is unknown to them, may prove injurious to their health: as a precaution against this, they should drink the suspected water cold, immediately after leaving the bath.

### CHAP. 38.—SIX REMEDIES DERIVED FROM MOSS. REMEDIES DERIVED FROM SAND.

Moss which has grown in water[81] is excellent as a topical application for gout; and, in combination with oil, it is good for pains and swellings in the ankles. The foam that floats[82] upon the surface of the water, used as a friction, causes warts to disappear. The sand,[83] too, of the sea-shore, that more particularly which is very fine and burnt white by the heat of the sun, is used remedially for its desiccative properties, the bodies of dropsical or rheumatic patients being entirely covered with it.

Thus much with reference to water itself; we will now turn to the aquatic productions, beginning, as in all other instances, with the principal of them, namely, salt and sponge.

[80] The joints being rendered more supple thereby.

[81] He probably means sea-water, alluding to certain kinds of sea-weed. Dioscorides speaks of it, in B. iv. c. 99, as being good for gout. It is, in reality, of some small utility in such cases.

[82] He most probably means sea-water.

[83] The Greeks used sand-baths for the purpose of promoting the perspiration; the names given to them were παρόπτησις and φοίνιγμος.

CHAP. 39. (7.)—THE VARIOUS KINDS OF SALT; THE METHODS OF PREPARING IT, AND THE REMEDIES DERIVED FROM IT. TWO HUNDRED AND FOUR OBSERVATIONS THEREUPON.

All salt is either native or artificial;[84] both kinds being formed in various ways, but produced from one of these two causes, the condensation or the desiccation, of a liquid.[85] The Lake of Tarentum is dried up by the heat of the summer sun, and the whole of its waters, which are at no time very deep, not higher than the knee in fact, are changed into one mass of salt. The same, too, with a lake in Sicily, Cocanicus by name, and another in the vicinity of Gela. But in the case of these two last, it is only the sides[86] that are thus dried up; whereas in Phrygia, in Cappadocia, and at Aspendus, where the same phænomena are observable, the water is dried up to a much larger extent, to the very middle of the lake, in fact. There is also another marvellous[87] circumstance connected with this last—however much salt is taken out of it in the day, its place is supplied again during the night. Every kind of lake-salt is found in grains, and not in the form of blocks.[88]

Sea-water, again, spontaneously produces another kind of salt, from the foam which it leaves on shore at high-water mark, or adhering to rocks; this being, in all cases, condensed by the action of the sun, and that[89] salt being the most pungent of the two which is found upon the rocks.

There are also three different kinds of native salt. In Bactriana there are two vast lakes;[90] one of them situate on the side

[84] "Sal fit." This expression is not correct, there being no such thing as *made* salt. It is only collected from a state of suspension or dissolution. Pliny, however, includes under the name "sal" many substances, which in reality are *not* salt. His "hammoniacum," for instance, if identical with hydrochlorate of ammonia, can with justice be said to be *made*, being formed artificially from other substances.

[85] "Coacto humore vel siccato." These two terms in reality imply the same process, by the medium of evaporation; the former perfect, the latter imperfect.

[86] The evaporation not being sufficiently strong to dry up the deeper parts.

[87] There is in reality nothing wonderful in this, considering that most lakes are constantly fed with the streams of rivers, which carry mineral salts along with them, and that the work of evaporation is always going on.

[88] "Glæbas."

[89] Because it is necessarily purer than that found upon the sand.

[90] The description is not sufficiently clear to enable us to identify these lakes with certainty. Ajasson thinks that one of them may be the Lake

of Scythia, the other on that of Ariana, both of which throw up vast quantities of salt.[91] So, too, at Citium, in Cyprus; and, in the vicinity of Memphis, they extract salt from the lake and dry it in the sun. The surface-waters of some rivers, also, condense[92] in the form of salt, the rest of the stream flowing beneath, as though under a crust of ice; such as the running waters near the Caspian Gates[93] for instance, which are known as the "Rivers of Salt." The same is the case, too, in the vicinity of the Mardi and of the people of Armenia. In Bactriana, also, the rivers Ochus[94] and Oxus carry down from the mountains on their banks, fragments of salt. There are also in Africa some lakes, the waters of which are turbid, that are productive of salt. Some hot springs, too, produce salt—those at Pagasæ for example. Such, then, are the various kinds of salt produced spontaneously by water.

There are certain mountains, also, formed of native salt; that of Oromenus, in India, for example, where it is cut out like blocks from a quarry, and is continually reproduced, bringing in a larger revenue to the sovereigns of those countries than that arising from their gold and pearls. In some instances it is dug out of the earth, being formed there, evidently, by the condensation of the moisture, as in Cappadocia for example, where it is cut in sheets, like those of mirror-stone.[95] The blocks of it are very heavy, the name commonly given to them being "mica."[96] At Gerrhæ,[97] a city of Arabia, the ramparts and houses are constructed of blocks of salt, which are soldered together by being moistened with water. King Ptolemæus discovered salt also in the vicinity of Pelusium, when he encamped there; a circumstance which induced other persons to seek and discover it in the scorched tracts that lie between Egypt and Arabia, beneath the sand. In the same

of Badakændir in the Khanat of Bokhara; and the other the lake that lies between Ankhio and Akeha, in the west of the territory of Balkh, and near the Usbek Tartars.

[91] "Sale exæstuant."

[92] In consequence of the intense heat.

[93] All these regions, Ajasson remarks, are covered with salt. An immense desert of salt extends to the north-east of Irak-Adjemi, and to the north of Kerman, between Tabaristan, western Khoracan, and Khohistan.

[94] Identified by Ajasson with the Herat and the Djihoun. He thinks that it is of some of the small affluents of this last that Pliny speaks.

[95] "Lapis specularis."

[96] A "crumb" properly, in the Latin language.

[97] See B. vi. c. 32.

manner, too, it has been found in the thirsting deserts of Africa, as far as the oracle of Hammon,[98] a locality in which the salt increases at night with the increase of the moon.

The districts of Cyrenaica are ennobled, too, by the production of hammoniacum,[99] a salt so called from the fact of its being found beneath the sands[1] there. It is similar in colour to the alum known as "schiston,"[2] and consists of long pieces, by no means transparent, and of an unpleasant flavour, but highly useful in medicine; that being held in the highest esteem, which is the clearest and divides into straight[3] flakes. There is one remarkable fact mentioned in connexion with it: so long as it lies under ground in its bed[4] it is extremely light, but the moment it is exposed to the light, it is hardly credible to what an extent its weight is increased. The reason for this is evident:[5] the humid vapours of the excavations bear the masses upwards, as water does, and so aid the workmen. It is adulterated with the Sicilian salt which we have mentioned as being found in Lake Cocanicus, as also with that of Cyprus, which is marvellously like it. At Egelasta,[6] in Nearer Spain, there is a salt, hewn from the bed in almost transparent blocks, and to which for this long time past most medical men, it is said, have given the preference over all other salt. Every spot in

[98] More commonly known as Jupiter Hammon.

[99] See B. xii. c. 49, and B. xxiv. c. 28, for an account of gum resin ammoniac, a produce of the same locality. The substance here spoken of is considered by Beckmann to be nothing but common salt in an impure state. See his *Hist. Inv.* Vol. II. pp. 398-9, where this passage is discussed at considerable length. Ajasson, on the other hand, considers it to be Hydrochlorate of ammonia, the Sal ammoniac of commerce. According to some accounts, it was originally made in the vicinity of the Temple of Jupiter Hammon, by burning camels' dung.

[1] Called ἄμμος, in Greek.

[2] See B. xxxv. c. 52.

[3] Sal ammoniac crystallizes in octahedrons.

[4] "Intra specus suos." On this passage, Beckmann says, "From what is said by Pliny it may with certainty be concluded that this salt was dug up from pits or mines in Africa.——Many kinds of rock-salt, taken from the mines of Wieliczka, experience the same change in the air; so that blocks which a labourer can easily carry in the mine, can scarcely be lifted by him after being for some time exposed to the air. The cause here is undoubtedly the same as that which makes many kinds of artificial salt to become moist and to acquire more weight."—Vol. II. p. 399, *Bohn's Ed.*

[5] According to modern notions, his reason is anything but *evident*.

[6] In Celtiberia. He alludes to the mountain of salt at Cardona, near Montserrat in Catalonia.

which salt[7] is found is naturally barren, and produces nothing. Such are the particulars, in general, which have been ascertained with reference to native salt.

Of artificial salt there are several kinds; the common salt, and the most abundant, being made from sea-water drained into salt-pans, and accompanied with streams of fresh water; but it is rain more particularly, and, above all things, the sun, that aids in its formation; indeed without this last it would never dry. In the neighbourhood of Utica, in Africa, they build up masses of salt, like hills in appearance; and when these have been hardened by the action of the sun and moon, no moisture will ever melt them, and iron can hardly divide them. In Crete, however, salt is made without the aid of fresh water, and merely by introducing sea-water into the salt-pans. On the shores of Egypt, salt is formed by the overflow of the sea upon the land, already prepared for its reception, in my opinion, by the emanations of the river Nilus. It is made here, also, from the water[8] of certain wells, discharged into salt-pans. At Babylon, the result of the first condensation is a bituminous[9] liquid, like oil, which is used for burning in lamps; when this is skimmed off, the salt is found beneath. In Cappadocia, also, both well and spring-water are introduced into the salt-pans. In Chaonia there is a spring, from the water of which, when boiled[10] and left to cool, there is an inert salt obtained, not so white as ordinary salt. In the Gallic provinces and in Germany, it is the practice to pour salt-water upon burning wood.[11]

## CHAP. 40.—MURIA.

In one part of Spain, they draw a brine for this purpose from deep-sunk pits, to which they give the name of "muria;" being of opinion, also, that it makes a considerable difference upon what kind of wood it is poured. That of the quercus they look upon as the best, as the ashes of it, unmixed, have

[7] Speaking generally, this is true; but soils which contain it in small quantities are fruitful.

[8] A similar method is still employed, Ajasson says, at the salt-mines near Innspruck in the Tyrol.

[9] Native bitumen; always to be found in greater or less quantities, in saliferous earths.

[10] The process of artificial evaporation.

[11] This would produce an impure alkaline salt. According to Townson, this practice still prevails in Transylvania and Moldavia.

the pungency of salt.[12] In other places, again, the wood of the hazel is held in high esteem; and thus, we see, by pouring brine upon it, charcoal even is converted into salt. All salt that is thus prepared with burning wood is black. I find it stated by Theophrastus, that the Umbri[13] are in the habit of boiling ashes of reeds and bulrushes in water, till there remains but little moisture unconsumed. The brine, too, of salted provisions is sometimes boiled over again, and, as soon as all the moisture has evaporated, the salt resumes its original form. That prepared from the pickle of the mæna[14] has the finest flavour.

CHAP. 41.—THE VARIOUS PROPERTIES OF SALT: ONE HUNDRED AND TWENTY HISTORICAL REMARKS RELATIVE THERETO.

Of the various kinds of sea-salt, the most esteemed is that of Salamis, in Cyprus; and of the lake-salts, that of Tarentum, and the salt known as Tattæan salt, which comes from Phrygia: these last two are also good for the eyes. That of Cappadocia, which is imported in small cubes,[15] imparts a fine colour, it is said, to the skin; but, for effacing wrinkles, that which we have[16] already spoken of as the salt of Citium is the best: hence it is that, in combination with gith,[17] it is used by females as a liniment for the abdomen after childbirth. The drier the salt, the stronger it is in taste; but the most agreeable of all, and the whitest known, is that of Tarentum. In addition to these particulars, we would remark also, that the whiter salt is, the more friable it is. Rain-water deadens every kind of salt, but dew-water makes it more delicate in flavour. North-easterly winds render the formation of salt more abundant, but, while south winds prevail, it never increases. It is only while north-easterly winds prevail, that flower of salt[18] is formed. Neither the salt of Tragasa, nor

[12] "The water, evaporating, would leave the salt behind, but mixed with charcoal, ashes, earth, and alkaline salts; consequently it must have been moist, or at any rate nauseous, if not refined by a new solution."—Beckmann's *Hist. Inv.* Vol. II. p. 493. *Bohn's Ed.*

[13] Not improbably a people of India so called, and mentioned in B. vi. c. 20.

[14] See B. ix. c. 42.

[15] "In laterculis." Hardouin considers this to mean small earthen vessels or pipes.

[16] In c. 39 of this Book.

[17] "Melanthium." See B. xx. c. 17.

[18] "Flos salis." Further mentioned in c. 42.

the Acanthian salt—so called from the town[19] where it is found—will decrepitate or crackle in the fire; nor will the froth of salt do so, or the outside scrapings, or refined salt. The salt of Agrigentum[20] resists fire, but decrepitates in water.

There are differences, too, in the colour of salt: at Memphis it is deep red, russet-coloured in the vicinity of the Oxus, purple at Centuripa, and so remarkably bright at Gela, situate also[21] in Sicily, as to reflect the image of objects. In Cappadocia there is a saffron-coloured fossil salt, transparent and remarkably odoriferous. For medicinal purposes, the ancients esteemed the salt of Tarentum in particular, and next to that all the marine salts, those collected from sea-foam more especially. For maladies of the eyes in cattle and beasts of burden, the salt of Tragasa and that of Bætica are employed. For made dishes[22] and ordinary food, the more easily a salt liquefies and the moister it is, the more highly it is esteemed; there being less bitterness in salt of this description, that of Attica and of Eubœa, for example. For keeping meat, a pungent, dry, salt, like that of Megara, is best. A conserve of salt is also made, with the addition of various odoriferous substances, which answers all the purpose of a choice sauce,[23] sharpening the appetite, and imparting a relish to all kinds of food: indeed, among the innumerable condiments which we use, the flavour of salt is always distinctly perceptible; and when we take garum[24] with our food, it is its salt flavour that is considered so exquisite. And not only this, but sheep even, cattle, and beasts of burden, are induced to graze all the better[25] by giving them salt; it having the effect, also, of considerably augmenting the milk, and imparting a superior flavour to the cheese.

We may conclude, then, by Hercules! that the higher enjoyments of life could not exist without the use of salt: indeed, so highly necessary is this substance to mankind, that the pleasures of the mind, even, can be expressed by no better term than the word "salt,"[26] such being the name given to

[19] See B. iv. c. 17.

[20] St. Augustin mentions this marvellous kind of salt. De Civit. Dei, B. xxi. cc. 5, 7.

[21] As well as Centuripa.

[22] "Opsonium."

[23] "Pulmentarii."

[24] See c. 43 of this Book.

[25] This is consistent with modern experience.

[26] "Sales."

all effusions of wit. All the amenities, in fact, of life, supreme hilarity, and relaxation from toil, can find no word in our language to characterize them better than this. Even in the very honours, too, that are bestowed upon successful warfare, salt plays its part, and from it, our word "salarium"[27] is derived. That salt was held in high esteem by the ancients, is evident from the Salarian[28] Way, so named from the fact that, by agreement, the Sabini carried all their salt by that road. King Ancus Martius gave six hundred modii of salt as a largess[29] to the people, and was the first to establish salt-works. Varro also informs us, that the ancients used salt by way of a relishing sauce; and we know, from an old proverb,[30] that it was the practice with them to eat salt with their bread. But it is in our sacred rites more particularly, that its high importance is to be recognized, no offering ever being made unaccompanied by the salted cake.[31]

### CHAP. 42.—FLOWER OF SALT: TWENTY REMEDIES. SALSUGO: TWO REMEDIES.

That which mainly distinguishes the produce of salt-works, in respect of its purity, is a sort of efflorescence,[32] which forms the lightest and whitest part of salt. The name "flower of salt"[33] is given, also, to a substance of an entirely different character, more humid by nature, and of a red or saffron colour; a kind of "rust of salt," as it were, with an unpleasant smell like that of garum, and differing therein not only from froth of salt,[34] but from salt itself. This substance is found

[27] Literally, "salt money"—"argentum" being understood. The term was originally applied to the pay of the generals and military tribunes. Hence our word "salary."

[28] Beginning at the Colline Gate. [29] "In congiario."

[30] Most probably "He cannot earn salt to his bread," or something similar, like our saying, "He cannot earn salt to his porridge." The two Greek proverbs given by Dalechamps do not appear to the purpose.

[31] "Mola salsa." [32] "Favillam."

[33] "Schroder thinks that in what Pliny says of *Flos Salis*, he can find the martial sal-ammoniac flowers of our chemists, [the double chloride of ammonium and iron], or the so-called *flores sales ammoniaci martiales*.—It is certain that what Dioscorides and Pliny call *flos salis*, has never yet been defined. The most ingenious conjecture was that of Cordus, who thought that it might be Sperma ceti; but though I should prefer this opinion to that of Schroder, I must confess that, on the grounds adduced by Matthioli and Conrad Gesner, it has too much against it to be admitted as truth."—Beckmann, *Hist. Inv.* Vol. II. p. 493. *Bohn's Ed.*

[34] Salt collected from the foam on the sea-shore.

in Egypt, and, as it would appear, is conveyed thither by the waters of the Nilus; though it is to be found floating upon the surface of certain springs as well. The best kind is that which yields a certain fatty [35] substance, like oil—for salt even, a thing that is quite marvellous to think of, is not without a degree of unctuousness.

This substance is sophisticated, and coloured with red earth, or, in most instances, with powdered potsherds; an adulteration to be detected by the agency of water, which washes off the fictitious colour, the natural colour being only removeable by the agency of oil. Indeed, it is for its colour that perfumers more particularly make such extensive use of this drug. When seen in the vessels, the surface of it is white, but that which lies in the middle is moister, as already stated. It is of an acrid nature, calorific, and bad for the stomach. It acts also as a sudorific, and, taken with wine and water, has a purgative effect upon the bowels. It is very useful, also, as an ingredient in acopa [36] and in detersive [37] compositions, and is remarkably efficacious for the removal of hairs from the eye-lids. It is the practice to shake up the sediment, in order to renovate the saffron colour of the drug.

In addition to these substances, there is another, known in the salt-works by the name of "salsugo," or "salsilago:" it is quite liquid, salter in taste than sea-water, but inferior to it in its properties.

### CHAP. 43.—GARUM: FIFTEEN REMEDIES.

Another liquid, too, of a very exquisite nature, is that known as "garum:"[38] it is prepared from the intestines of fish and various parts which would otherwise be thrown away, macerated in salt; so that it is, in fact, the result of their putrefaction. Garum was formerly prepared from a fish, called "garos"[39] by the Greeks; who assert, also, that a fumigation made with its head has the effect of bringing away the afterbirth.

(8.) At the present day, however, the most esteemed kind

[35] A sort of bitumen, probably.

[36] Medicines for relieving weariness. See B. xxiii. c. 45, and B. xxix. c. 13.

[37] "Smegmatis."

[38] It was, probably, of an intermediate nature, between caviar and anchovy sauce.

[39] See B. xxxii. c. 53. It does not appear to have been identified.

of garum is that prepared from the scomber,[40] in the fisheries of Carthago Spartaria:[41] it is known as "garum of[42] the allies," and for a couple of congii we have to pay but little less than one thousand sesterces. Indeed, there is no liquid hardly, with the exception of the unguents, that has sold at higher prices of late; so much so, that the nations which produce it have become quite ennobled thereby. There are fisheries, too, of the scomber on the coasts of Mauretania, and at Carteia in Bætica, near the Straits[43] which lie at the entrance to the Ocean; this being the only use that is made of the fish. For the production of garum, Clazomenæ is also famed, Pompeii, too, and Leptis; while for their muria, Antipolis,[44] Thurii, and of late, Dalmatia,[45] enjoy a high reputation.

### CHAP. 44.—ALEX: EIGHT REMEDIES.

Alex, which is the refuse of garum, properly consists of the dregs of it, when imperfectly strained: but of late they have begun to prepare it separately, from a small fish that is otherwise good for nothing, the apua[46] of the Latins, or aphua of the Greeks, so called from the fact of its being engendered from rain.[47] The people of Forum Julii[48] make their garum from a fish to which they give the name of "lupus."[49] In process of time, alex has become quite an object of luxury, and the various kinds that are now made are infinite in number. The same, too, with garum, which is now prepared in imitation of the colour of old honied wine, and so pleasantly flavoured as to admit of being taken as a drink. Another kind, again, is dedicated to those superstitious observances[50] which enjoin strict chastity, and that prepared from fish without[51] scales, to

[40] As to the identity of the Scomber, see B. ix. c. 19.

[41] See B. xix. c. 7.

[42] "Garum sociorum."

[43] The present Straits of Gibraltar.

[44] In Gallia Narbonensis.

[45] Sillig reads "Delmatia" here.

[46] See B. ix. c. 74. The fry of larger fish, Cuvier says.

[47] Ajasson considers this to be an absurd derivation; and thinks it much more probable, that the name is from *ἀ* privative, and *φύω*, "to beget;" it being a not uncommon notion that these small fish were produced spontaneously from mud and slime.

[48] The present Frejus, in the south of France.

[49] "Wolf." Not the fish of that name, Hardouin says, mentioned in B. ix. c. 28.

[50] The festivals of Ceres. The devotees, though obliged to abstain from meat, were allowed the use of this *garum*, it would appear.

[51] Gesner proposes to read "*non* carêntibus," "*with* scales"—fishes

the sacred rites of the Jews. In the same way, too, alex has come to be manufactured from oysters, sea-urchins, sea-nettles, cammari,[52] and the liver of the surmullet; and a thousand different methods have been devised of late for ensuring the putrefaction of salt in such a way as to secure the flavours most relished by the palate.

Thus much, by the way, with reference to the tastes of the present day; though at the same time, it must be remembered, these substances are by no means without their uses in medicine. Alex, for instance, is curative of scab in sheep, incisions being made in the skin, and the liquor poured therein. It is useful, also, for the cure of wounds inflicted by dogs or by the sea-dragon, the application being made with lint. Recent burns, too, are healed by the agency of garum, due care being taken to apply it without mentioning it by name. It is useful, too, for bites inflicted by dogs, and for that of the crocodile in particular; as also for the treatment of serpiginous or sordid ulcers. For ulcerations, and painful affections of the mouth and ears, it is a marvellously useful remedy.

Muria, also, as well as the salsugo which we have mentioned,[53] has certain astringent, mordent, and discussive properties, and is highly useful for the cure of dysentery, even when ulceration has attacked the intestines. Injections are also made of it for sciatica, and for cœliac fluxes of an inveterate nature. In spots which lie at a distance in the interior, it is used as a fomentation, by way of substitute for sea-water.

### CHAP. 45. (9.)—THE NATURE OF SALT.

Salt, regarded by itself, is naturally igneous, and yet it manifests an antipathy to fire, and flies[54] from it. It consumes everything, and yet upon living bodies it has an astringent, desiccative, and binding effect, while the dead it preserves from putrefaction,[55] and makes them last for ages even. In respect, however, of its medicinal properties, it is of a mordent, burning, detergent, attenuating, and resolvent nature; it is, however, injurious to the stomach, except that it acts as a stimulant

*without* scales being forbidden to the Jews by the Levitical Law. See Lev. c. xi. ver. 10. It is, most probably, Pliny's own mistake.

[52] See B. xxvii. c. 2.

[53] At the end of c. 42.

[54] He alludes to its decrepitation in flame.

[55] Pharnaces caused the body of his father Mithridates to be deposited in brine, in order to transmit it to Pompey.

to the appetite, For the cure of injuries inflicted by serpents, it is used with origanum, honey, and hyssop; and for the sting of the cerastes, with origanum, cedar-resin, pitch, or honey. Taken internally with vinegar, it is good for injuries caused by the scolopendra; and, applied topically, with an equal proportion of linseed, in oil or vinegar, for stings inflicted by scorpions. For stings of hornets, wasps, and insects of a similar description, it is applied with vinegar; and, for the cure of hemicrania, ulcers on the head, blisters, pimples, and incipient warts, with veal-suet. It is used also among the remedies for the eyes, and for the removal of fleshy excrescences upon those organs, as also of hangnails[66] upon the fingers or toes. For webs that form upon the eyes it is peculiarly useful, and hence it is that it is so commonly employed as an ingredient in eye-salves, as well as plasters. For all these last-mentioned purposes, the salt of Tatta or of Caunus is more particularly in request.

In cases where there is ecchymosis of the eyes, or a bruise from the effects of a blow, salt is applied, with an equal quantity of myrrh and honey, or with hyssop in warm water, the eyes being also fomented with salsugo. For this last-mentioned purpose, the Spanish salt is preferred; and when wanted for the treatment of cataract, it is ground upon small whet-stones, with milk. For bruises it is particularly useful, wrapped in a linen pledget and renewed from time to time, being first dipped in boiling water. For the cure of running ulcers of the mouth, it is applied with lint; gum-boils are also rubbed with it; and, broken to pieces and powdered fine, it removes granulations on the tongue. The teeth, it is said, will never become carious or corroded, if a person every morning puts some salt beneath his tongue, fasting, and leaves it there till it has melted. Salt effects the cure also of leprosy, boils, lichens, and itch-scabs; for all which purposes it is applied with raisins—the stones being first removed—beef-suet, origanum, and leaven, or else bread. In such cases it is the salt from Thebaïs that is mostly used; the same salt being considered preferable for the treatment of prurigo, and being highly esteemed for affections of the uvula and tonsillary glands, in combination with honey.

[66] He uses the word "pterygia" here, as applied to the whole of the body—"totius corporis"—in its two distinct senses, a hangnail or excrescence on the fingers, and a web or film on the eyes.

Every kind of salt is useful for the cure of quinzy; but, in addition to this, it is necessary to make external applications simultaneously with oil, vinegar, and tar. Mixed with wine, it is a gentle aperient to the bowels, and, taken in a similar manner, it acts as an expellent of all kinds of intestinal worms. Placed beneath the tongue, it enables convalescents to support the heat[57] of the bath. Burnt more than once upon a plate at a white heat, and then enclosed in a bag, it alleviates pains in the sinews, about the shoulders and kidneys more particularly. Taken internally, and similarly burnt at a white heat and applied in bags, it is curative of colic, griping pains in the bowels, and sciatica. Beaten up in wine and honey, with meal, it is a remedy for gout; a malady for the especial behoof of which the observation should be borne in mind, that there is nothing better for all parts of the body than sun and salt:[58] hence[59] it is that we see the bodies of fishermen as hard as horn—gout, however, is the principal disease for the benefit of which this maxim should be remembered.

Salt is useful for the removal of corns upon the feet, and of chilblains: for the cure of burns also, it is applied with oil, or else chewed. It acts as a check also upon blisters, and, in cases of erysipelas and serpiginous ulcers, it is applied topically with vinegar or with hyssop. For the cure of carcinoma it is employed in combination with Taminian[60] grapes; and for phagedænic ulcers it is used parched with barley-meal, a linen pledget steeped in wine being laid upon it. In cases of jaundice, it is employed as a friction before the fire, with oil and vinegar, till the patient is made to perspire, for the purpose of preventing the itching sensations attendant upon that disease. When persons are exhausted with fatigue, it is usual to rub them with salt and oil. Many have treated dropsy with salt, have used external applications of salt and oil for the burning heats of fever, and have cured chronic coughs by laying salt upon the patient's tongue. Salt has been used, also, as an injection for sciatica, and has been applied to ulcers of a fungous or putrid nature.

To bites inflicted by the crocodile, salt is applied, the sores

[57] In c. 23, he has said much the same of cold water.
[58] "Sale et sole."
[59] This passage would come more naturally *after* the succeeding one.
[60] See B. xxiii. c. 13.

being tightly bandaged with linen cloths, first dipped[61] in vinegar. It is taken internally, with hydromel, to neutralize the effects of opium, and is applied topically, with meal and honey, to sprains and fleshy excrescences. In cases of tooth-ache, it is used as a collutory with vinegar, and is very useful, applied externally, with resin. For all these purposes, however, froth of salt[62] is found to be more agreeable and still more efficacious. Still, however, every kind of salt is good as an ingredient in acopa,[63] when warming properties are required: the same, too, in the case of detersive applications, when required for plumping out and giving a smooth surface to the skin. Employed topically, salt is curative of itch-scab in sheep and cattle, for which disease it is given them to lick. It is injected, also, with the spittle, into the eyes of beasts of burden. Thus much with reference to salt.

CHAP. 46. (10.)—THE VARIOUS KINDS OF NITRUM, THE METHODS OF PREPARING IT, AND THE REMEDIES DERIVED FROM IT: TWO HUNDRED AND TWENTY-ONE OBSERVATIONS THEREON.

And here we must no longer defer giving an account of nitrum;[64] which in its properties does not greatly differ from salt, and deserves all the more to be attentively considered, from the evident fact that the medical men who have written upon it were ignorant of its nature; of all which authors Theophrastus is the one that has given the greatest attention to the point. It is found in small quantities in Media, in certain valleys there that are white with heat and drought; the name given to it being "halmyrax."[65] In Thracia, too, near Philippi,

[61] "Ita ut batuerentur ante." From the corresponding passage in Dioscorides, where the expression Βαπτόμενοι ἐις ὄξος is used, it would appear that the proper word here is "baptizarentur;" or possibly, a lost Græco-Latin word, "bapterentur." Littré suggests "hebetarentur," "the part being first numbed" by the aid of a bandage.

[62] "Spuma salis." Collected from the foam on the sea-shore.

[63] See Note 36, above, p. 507.

[64] Beckmann, who devotes several pages to a consideration of the "nitrum" of the ancients, considers it not to be our "nitre," or "saltpetre," but a general name for impure alkaline salts. See his *Hist. Inv.* Vol. II. pp. 490—503, *Bohn's Ed.* Ajasson, without hesitation, pronounces it to be nitrate of potash, neither more or less than our saltpetre, and quotes a statement from Andreossy, that it is still to be found in great quantities at Mount Ptou-Ampihosem, near the city of Pihosem, called Nitria by St. Jerome.

[65] "Salt bursting from the earth."

it is found, but in smaller quantities, and deteriorated with earthy substances, being known there as "agrion."[66] As to that prepared from the burnt wood of the quercus,[67] it never was made to any very great extent, and the manufacture of it has been long since totally abandoned. Nitrous[68] waters are also found in numerous places, but not sufficiently impregnated to admit of condensation.[69]

The best and most abundant supply is found at Litæ, in Macedonia, where it is known as "Chalastricum:"[70] it is white and pure, and closely resembles salt. In the middle of a certain nitrous lake there, a spring of fresh water issues forth. In this lake the nitrum[71] forms for nine days, about the rising of the Dog-star, and then ceases for the same period, after which it again floats upon the surface, and then again ceases: facts which abundantly prove that it is the peculiar nature of the soil which generates the nitrum, it being very evident that, when the formation is there interrupted, neither the heat of the sun nor the fall of rain is productive of the slightest effect. It is also a truly marvellous fact, that though the spring of fresh water is always uninterruptedly flowing, the waters of the lake never increase or overflow. If it happens to rain on the days during which the nitrum is forming, the result is, that it is rendered additionally salt thereby: the prevalence of north-east winds, too, still more deteriorates its quality, as they have a tendency to stir up the mud at the bottom. Such is the formation of native nitrum.

In Egypt, again, it is made artificially, and in much greater abundance, but of inferior quality, being tawny and full of

[66] "Wild."

[67] See c. 40 of this Book. He is evidently speaking of a *vegetable* alkali here. See Beckmann, Vol. II. pp. 492-3, *Bohn's Ed.*

[68] Beckmann thinks that these kinds of water were in reality only impure and not potable, from their nauseous taste, and that hence they were considered as nitrous. Nitrous water, he remarks, or water containing saltpetre, in all probability, does not exist. Vol. II. pp. 498-9. *Bohn's Edition.*

[69] Or in other words, crystallization. Beckmann remarks that, in reference to alkaline water, this is undoubtedly true. Vol. II. p. 499.

[70] From the adjacent town of Chalastra, on the Thermæan Gulf. The site is probably occupied by the modern Kulakia.

[71] Carbonate of soda is found in the mineral waters of Seltzer and Carlsbad, and in the volcanic springs of Iceland, the Geysers more particularly.

stones. It is prepared in pretty nearly the same manner[72] as salt, except that in the salt-pans it is sea-water that is introduced, whereas in the nitre-beds it is the water of the river Nilus; a water which, upon the subsidence of the river, is impregnated with nitrum for forty days together, and not, as in Macedonia, at intermittent periods only. On occasions when there has been a fall of rain, a smaller proportion of river-water is employed. As soon, too, as any quantity of nitrum has formed, it is immediately removed, in order that it may not melt in the beds. This substance, also, contains a certain proportion of oil,[73] which is very useful for the cure of scab in animals. Piled up in large heaps, it keeps for a very considerable time. It is a marvellous fact, that, in Lake Ascanius[74] and in certain springs in the vicinity of Chalcis, the water is fresh and potable on the surface, and nitrous below. The lightest part of nitrum is always considered the best, and hence it is that the froth of it is so much preferred. Still, however, when in an impure state, it is very useful for some purposes, colouring purple[75] cloth, for instance, and, indeed, all kinds of dyeing. It is employed, also, very extensively in the manufacture of glass, as we shall more fully mention on the appropriate occasion.[76]

The only nitre-works in Egypt were formerly those in the vicinity of Naucratis and Memphis; those near Memphis being inferior to the others, the piles of nitrum there prepared being as hard as stone, and many of the heaps having become changed into rocks. When in this state, vessels are made of it, and very frequently they melt it with sulphur[77] on

[72] Ajasson remarks, that from this we may conclude that the fabrication of nitrate of potash, or saltpetre, was in its infancy. It is by no means improbable that the *artificial* nitrum, *here* mentioned by Pliny, really was artificial saltpetre, more or less impure; the *native* nitrum, on the other hand, being, as Beckmann suggests, a general term for impure alkaline mineral salts, in common with native saltpetre. Pliny's account, however, is confused in the highest degree, and in some passages far from intelligible.

[73] Of a bituminous nature, probably. See c. 42 of this Book.

[74] See B. v. c. 40. An alkaline water, Beckmann thinks. See Vol. II. pp. 96-7. *Bohn's Ed.*

[75] He may possibly mean bleaching the material before dyeing.

[76] See B. xxxvi. c. 65. This certainly goes far towards proving that under the name "nitrum," alkaline salts were included.

[77] "Faciunt ex his vasa, necnon frequenter liquatum cum sulphure, co-

a charcoal fire.[78] When substances[79] are wanted to keep, they employ this last kind of nitrum. In Egypt there are also nitre-beds, the produce of which is red, owing to the colour of the earth in the same locality. Froth of nitrum,[80] a substance held in very high esteem, could only be made, according to the ancients, when dews had fallen; the pits being at the moment saturated with nitrum, but not having arrived at the point of yielding it. On the other hand, again, when the pits were in full activity, no froth would form, it was said, even though dews should fall. Others, again, have attributed the formation of this last substance to the fermentation of the heaps of nitrum. In a succeeding age, the medical men, speaking of it under the name of "aphronitrum,"[81] have stated that it was collected in Asia, where it was to be found oozing from the soft sides of certain mines—the name given to which was "colyces"[82]—and that it was then dried in the sun. The very best is thought to be that which comes from Lydia; the test of its genuineness being its extreme lightness, its friability, and its colour, which should be almost a full purple. This last is imported in tablets, while that of Egypt comes enclosed in

quentes in carbonibus." This passage Beckmann pronounces to be one of the *darkest* parts in the history of *nitrum*. See Vol. II. p. 502. He is of opinion that not improbably the result here obtained would be, liver of sulphur, which when it cools is hard, but soon becomes moist when exposed to the air. Dalechamps, it would appear, explains the whole of this passage as applicable to glazing; but in such case, as Beckmann observes, the nitrum could serve only as a flux. Michaelis suggests that the vessels here mentioned, were cut, not for real use, but merely for ornament, in the same manner as they are still made, occasionally, from rock-salt.

[78] The mention of nitrum, sulphur, and charcoal, probably the three ingredients of gunpowder, in such close proximity, is somewhat curious.

[79] "Quæ" seems a preferable reading to "quos."

[80] "Spuma nitri." An accidental property, Beckmann says, of the same salt that has been previously called "Chalastricum," "Halmyrax," "Aphronitrum," and "Agrion." In his opinion, "the ancients were acquainted with no other than *native* nitrum, which they called *artificial*, only when it required a little more trouble and art to obtain it."—*Hist. Inv.* Vol. II. p. 502. *Bohn's Ed.*

[81] "Froth of nitre." Ajasson identifies this with hydro-carbonate of soda.

[82] Supposed by Hardouin to be derived from the Greek κόλικας, "round cakes;" owing to the peculiar form of the pieces of rock by which the aphronitrum was produced. The reading, however, is very doubtful. Sillig, from Photius, suggests that it should be "scolecas."

vessels pitched within, to prevent its melting,[83] the vessels being previously prepared by being thoroughly dried in the sun.[84]

To be good, nitrum should be very fine, and extremely spongy and porous. In Egypt, it is sophisticated with lime, an adulteration easily detected[85] by tasting it; for when pure, it liquefies immediately, while that which has been adulterated, remains undissolved sufficiently long to leave a pungent taste[86] in the mouth. It is burnt in a close earthen vessel, as otherwise it would decrepitate:[87] except in this last case, however, the action of fire does not cause it to decrepitate. This substance neither produces nor nourishes anything; while, in the salt-pans, on the other hand, we see plants growing, and the sea, we know, produces immense numbers of animated beings, though, as to plants, sea-weed only. It is evident, too, that the acridity[88] of nitrum must be much greater than that of salt, not only from the fact last mentioned, but from the circumstance also, that at the nitre-beds the shoes wear out with the greatest rapidity; localities which are otherwise very healthy, and remarkably beneficial for the eye-sight. At the nitre-works ophthalmia is a thing unknown: persons, too, that come there with ulcers upon them experience a rapid cure; though ulcerations formed upon the spot are but slow in healing. Used as a friction with oil, nitrum is a sudorific, and acts emolliently upon the body. That of Chalastra is used as a substitute for salt, in making bread,[89] and the Egyp-

[83] One proof, Beckmann thinks, that Soda is meant. See Vol. II. p. 491.

[84] "Whether Pliny means that the vessels were not burnt, but only baked in the sun, or that before they were filled, they were completely dried in the sun, has been determined by no commentator. To me the latter is probable."—Beckmann, *Hist. Inv.* Vol. II. p. 491.

[85] Beckmann thinks that this mode of adulteration, with lime, is an additional proof that the "nitrum" of our author was only soda. See Vol. II. p. 492.

[86] That, namely, of the lime. Quick-lime, certainly, would have a pungent taste, in comparison with that of soda, but not in comparison with that of saltpetre.

[87] Another proof, Beckmann thinks, that it was native soda, impregnated with common salt. Vol. II. p. 492.

[88] This would hardly apply to soda.

[89] Probably to promote its rising, as Beckmann observes, Vol. II. p. 496; a circumstance which goes a great way towards proving that "Soda"

tian nitrum is eaten[90] with radishes,[91] it having the effect of making them more tender; though as to other edibles it turns them white and spoils them. To vegetables it imparts an additional greenness.[92]

Viewed medicinally, nitrum is calorific, attenuant, mordent, astringent, desiccative, and ulcerating: it is good, too, in all cases where certain humours require to be drawn out or dispersed, or where gentle mordents or attenuants are required, as in the case of pustules and pimples, for example. Some persons ignite it for this purpose, and, after quenching it in astringent wine, bruise and use it, without oil, at the bath. Applied with dried iris powdered, and green olive oil, it checks immoderate perspiration. Applied topically with a fig, or boiled down to one half in raisin wine, it removes marks upon the eyes and granulations of the eyelids. It is used, also, for the removal of argema, boiled in a pomegranate rind with raisin wine. Used as an ointment, in combination with honey, it improves the eye-sight. It is very useful, also, for tooth-ache, taken as a collutory with wine and pepper, or boiled with a leek. Burnt, and employed as a dentifrice, it restores teeth[93] to their original colour that have turned black; and an application of it, with Samian earth and oil, kills nits and other vermin of the head. Dissolved in wine, it is used as an injection for suppurations of the ears, and, applied with vinegar, it consumes filth that has accumulated there. Introduced dry into the ears, it disperses singings and tinglings in those organs.

Applied topically, in the sun, with an equal quantity of Cimolian[94] chalk dissolved in vinegar, it removes white morphew; and a mixture of it with resin, or with white raisins—the stones being beaten up as well—is an excellent cure for

was included, at least, under the name of "nitrum." Carbonate of soda is extensively used for this purpose at the present day.

[90] And to correct the acridity of the radishes, possibly. A somewhat analogous fact is mentioned by Drury, in his "Journal in Madagascar." He says that the sourest tamarinds, "mixed with wood ashes, become sweet and eatable." See p. 316.—We are not unaware that many look upon this work and its statements as a work of fiction.

[91] See B. xix. c. 26.

[92] Carbonate of soda is added to pickles and boiling vegetables for this purpose.

[93] Vegetable ashes, and tobacco-ashes in particular, have the same effect.

[94] See B. xxxv. c. 57.

boils. It is useful, also, for inflammations of the testes; and, in combination with axle-grease, for pituitous eruptions on all parts of the body. For the cure of bites inflicted by dogs, it is used with resin, the application being made at first with vinegar. With lime and vinegar, it is used as a liniment for stings inflicted by serpents, as, also, for ulcerations, whether phagedænic, putrid, or serpiginous; in cases, too, of dropsy, it is employed both internally and externally, beaten up with figs. Taken internally as a decoction, in doses of one drachma, with rue, dill, or cummin, it effectually removes griping pains in the bowels. An external application of it, with oil and vinegar, is highly refreshing to persons exhausted with fatigue; and it is equally beneficial for shudderings and cold shiverings, the feet and hands of the patient being well rubbed with it, mixed with oil. It allays the itching sensations attendant upon jaundice, more particularly when it is administered to the patient while perspiring, with vinegar. Taken internally in oxycrate, it is an antidote to the poison of fungi; and, taken with water, it acts beneficially, as an emetic, in cases where the buprestis has been swallowed.

To persons who have taken bull's blood,[95] nitrum is administered, in combination with laser.[96] Mixed with honey and cow's milk, it is curative of ulcers upon the face. For the cure of burns, it is applied pounded, being first parched till it turns black. For pains in the bowels and kidneys, and for rigidities of the limbs and pains in the sinews, it is used in the form of an injection. For the cure of paralysis of the tongue, it is applied to that organ with bread, and to asthmatic patients it is administered in a ptisan. Flower of nitrum, used in combination with equal proportions of galbanum and turpentine respectively, is curative of chronic coughs; the mixture being taken in pieces the size of a bean. Nitrum[97] itself, boiled and melted with tar, is given to patients to swallow, for quinzy.

Flower of nitrum, mixed with oil of cyprus,[98] and applied in the sun, is a soothing liniment for pains in the joints. Taken internally with wine, it is curative of jaundice. It acts as a carminative also; and it arrests bleeding at the nose, the

[95] Viewed by the ancients as a poison, when taken warm; but erroneously, as we have more than once remarked.

[96] See B. xix. c. 15.

[97] Nitre balls are still given to the patient to suck, in cases of sore throat.

[98] See B. xii. c. 51.

vapour of it in boiling water being inhaled by the patient. Mixed with alum, it removes porrigo; and, used daily with water, as a fomentation, it removes offensive odours of the armpits. Used in combination with wax, it heals ulcers produced by pituitous secretions, and, similarly employed, it is very useful for affections of the sinews. For the cure of the cœliac flux, it is used in the form of an injection. Many authorities recommend the use of it, with oil, as a friction when cold shiverings are just coming on; as also, for the removal of leprous spots and freckles. It is a good plan also, to use a sitting-bath made with an infusion of nitrum, for the cure of gout, atrophy, opisthotony, and tetanus.

Both salt and nitre, boiled with sulphur,[99] become petrified.

### CHAP. 47. (11.)—SPONGES, AND THE REMEDIES DERIVED FROM THEM: NINETY-TWO OBSERVATIONS THEREON.

We have already,[1] when speaking of the marine productions, described the various kinds of sponge. Some authorities make the following distinctions: they regard as males[2] those sponges which are pierced with more diminutive holes, are more compact in form and more ready to imbibe, and are stained, to satisfy luxurious tastes, in various colours, sometimes purple even: those, on the other hand, which have holes, larger and running into one another, they consider to be females. Among the male sponges, too, there is one kind, harder than the others, the name given to which is "tragi,"[3] and the holes of which are extremely small and numerous. Sponges are made white artificially; the softest being chosen for the purpose, and after they have been steeped the whole summer through with the foam of the sea. They are then exposed to the action of the moon and hoar-frosts, being turned upside down, or, in other words, with that part upwards by which they formerly adhered to the rocks, the object being that they may become white throughout.

That sponges are animated beings, we have already stated;

[99] Beckmann considers that this statement throws some light on the obscure passage, commented on in Note 77, p. 514. See *Hist. Inv.* Vol. II. p. 503. *Bohn's Ed.*

[1] In B. ix. c. 69.

[2] No such distinction, of course, *really* exists; sponge being in reality a fibrous tissue formed by minute animals.

[3] "Goats," literally.

and not only this, but they have a coat of blood[4] even, adhering to them. Some say that they regulate their movements by the sense of hearing, and that at the slightest noise they contract themselves, and emit an abundant moisture: when such is the case, it is said, it is impossible to tear them away from the rocks, and consequently they must be cut, an operation during which they emit a sanious secretion. Those sponges, too, are preferred to all others, which are grown on spots with a north-east aspect, the physicians assuring us that these retain the breath of life the longest of all; a circumstance which renders them additionally useful to the human body, from the union which is thereby effected of their vital principle with our own.[5] It is for this reason, too, that they are preferred as fresh as possible, and in a moist state rather than dry. They are not so useful, however, if applied with hot water,[6] and still less so if they are oiled, or applied to the body when just anointed. The compact sponges, it is thought, have less adhesive power than the others.

The softest kind of sponge are those employed for tents.[7] Applied with honied wine, sponges reduce swellings of the eyes, and are extremely useful for the removal of rheum from those organs, the very finest and softest being of necessity selected for the purpose. Sponges are applied, also, with oxycrate, to defluxions of the eyes, and, with warm vinegar, for head-ache. In addition to these properties, fresh sponges are resolvent, emollient, and soothing; but when old, they lose their healing properties for wounds. They are employed, also, in medicine, for cleansing sores, and for either fomenting or covering the parts fomented, till some other application is made. Applied topically, they have a healing effect upon running ulcers, and upon sores on the bodies of aged persons. Fractures, too, and wounds are most effectually fomented with sponge; and when surgical operations are performed, it instantly absorbs the blood, so as to allow the incision to be seen. Sponges are applied, also, as a bandage, to inflamed wounds, sometimes

[4] See B. ix. c. 69. He probably alludes to the semifluid thin coat of animal jelly which covers the sponge in its recent state, and is susceptible of a slight contraction on being touched.

[5] A fanciful notion, certainly.

[6] Hot water renders them greasy, so to say; an inconvenience which may be remedied by steeping them in an alkaline solution, or in urine.

[7] "Penicilli."

dry, and, in some cases, moistened with vinegar, wine, or cold water. Soaked in rain-water, and applied to the incision, they prevent cuts recently inflicted from swelling. They are used as an application for such parts of the body, though apparently uninjured, as are threatened with occult humours which require to be dispersed; as also for reducing the tumours known to us as "apostemes," the parts being first fomented with a decoction of honey. Sponges are employed, also, for affections of the joints, steeped in vinegar and salt, or in oxycrate: in cases, however, where the attack is attended with fever, water alone is used with the sponge. Soaked in salt and water, sponges are applied to callosities; and, with vinegar, they are used for stings inflicted by scorpions.

In the treatment of wounds, sponges are sometimes used as a substitute for greasy wool, either with wine and oil, or with salt and water; the only difference being, that wool acts emolliently upon sores, whereas sponge has an astringent action, and absorbs the vitiated humours. To dropsical patients, bandages of sponge are applied, either dry or steeped in warm water or oxycrate, according as there is a necessity for soothing the skin, or for covering it up and drying it. Sponges are applied, also, in all those diseases where warmth is required, being first soaked in boiling water and then squeezed out between a couple of boards. Employed in this manner, too, they are very useful for affections of the stomach and for the excessive heats attendant upon fever. Steeped in oxycrate, they are good for diseases of the spleen, and in vinegar for erysipelas; nothing, in fact, being equally efficacious. Sponge, when thus used, should always be so applied as amply to cover the adjacent parts that are not affected.

Employed with vinegar or cold water, sponge arrests hæmorrhage; soaked in warm salt and water, and frequently renewed, it removes the lividity which results from a recent blow. Used with oxycrate, it disperses pains and swellings in the testes. To bites inflicted by dogs, it is a good plan to apply sponge, from time to time, cut fine, and moistened with vinegar, cold water, or honey. Ashes of African[8] sponge, with juice of cut-leek and a mixture of salt and cold water, are good, taken internally, for patients suffering from discharges of blood: applied topically to the forehead, with oil or

[8] See B. ix. c. 69.

vinegar, they are curative of tertian fevers. The sponge of Africa, more particularly, soaked in oxycrate, disperses tumours. Ashes of any kind of sponge burnt with pitch, arrest the discharge of blood from wounds; though some recommend, for this purpose, the sponge with large pores only, burnt with pitch. For affections of the eyes, sponge is burnt in vessels of unbaked earthenware; the ashes being found highly efficacious for granulations of the eyelids, fleshy excrescences, and all diseases of those parts which require detergents, astringents, or expletives. For all these purposes, however, it is the best plan first to rinse the ashes. When the body is in a diseased state, sponge acts as a substitute for body-scrapers and linen towels, and it protects the head most efficiently against the action of the sun.

Medical men, in their ignorance, comprehend all sponges under two names; African sponge, the substance of which is tougher and firmer; and Rhodian sponge, which is softer and better adapted for fomentations. At the present day, however, the softest sponges of all are those found about the walls of the city of Antiphellos.[9] Trogus informs us that the softest tent sponges are found out at sea, off the coast of Lycia, upon spots from which the sponge has been previously removed: we learn, too, from Polybius, that these fine sponges, suspended over a patient's bed, will ensure him additional repose at night.[10]

We will now turn to the remedies derived from the marine and aquatic animals.

SUMMARY. — Remedies, narratives, and observations, nine hundred and twenty-four.

ROMAN AUTHORS QUOTED.—M. Varro,[11] Cassius[12] of Parma, Cicero,[13] Mucianus,[14] Cælius,[15] Celsus,[16] Trogus,[17] Ovid,[18] Polybius,[19] Sornatius.[20]

[9] See B. v. c. 28. [10] An absurdity, of course. [11] See end of B. ii.
[12] Called C. Cassius Severus Parmensis, according to some authorities. He was one of the murderers of Cæsar, and perished, the last of them by a violent end, about B.C. 30. He is supposed to have written tragedies, epigrams, and other works. See Horace, Epist. B. i. Ep. 4, l. 3.
[13] See end of B. vii. [14] See end of B. ii.
[15] Cælius Antipater. See end of B. ii. [16] See end of B. vii.
[17] See end of B. vii. [18] See end of B. xviii. [19] See end of B. iv.
[20] This personage is entirely unknown. It may possibly be a corruption

FOREIGN AUTHORS QUOTED.—Callimachus,[21] Ctesias,[22] Eudicus,[23] Theophrastus,[24] Eudoxus,[25] Theopompus,[26] Polycritus,[27] Juba,[28] Lycus,[29] Apion,[30] Epigenes,[31] Pelops,[32] Apelles,[33] Democritus,[34] Thrasyllus,[35] Nicander,[36] Menander[37] the Comic writer, Attalus,[38] Sallustius Dionysius,[39] Andreas,[40] Niceratus,[41] Hippocrates,[42] Anaxilaüs.[43]

for Soranus, a poet of that name (Q. Valerius Soranus) who flourished about 100 B.C. See also B. xxxii. c. 23.

[21] See end of B. iv. [22] See end of B. ii.

[23] Beyond the mention made of him in c. 9 of this Book, nothing whatever is known of him. [24] See end of B. iii.

[25] See end of B. ii., and end of B. vi. [26] See end of B. ii.

[27] See end of B. xii. [28] See end of B. v. [29] See end of B. xii.

[30] See end of B. xxx. [31] See end of B. ii.

[32] He is also mentioned in B. xxxii. c. 16, but beyond that, nothing whatever appears to be known of him. He must not be confounded with Pelops of Smyrna, one of Galen's preceptors, who flourished in the second century after Christ. [33] See end of B. xxviii. [34] See end of B. ii.

[35] See end of B. ii. [36] See end of B. viii.

[37] A celebrated Comic poet, a disciple of Theophrastus, and the inventor of the New Comedy at Athens. Only a few fragments of his works survive. [38] See end of B. viii.

[39] A physician, of whom, beyond the mention made of him in B. xxxii. c. 26, no further particulars appear to be known. [40] See end of B. xx.

[41] A Greek writer on plants, and a follower of Asclepiades of Bithynia. He is supposed to have flourished in the latter half of the first century B.C. His medical formulæ are several times quoted by Galen. See c. 37 of the succeeding Book.

[42] See end of B. vii. [43] See end of B. xxi.

END OF VOL. V.

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